



Safety Data Sheet

PERSIL LIQUID DETERGENT

Revision: 2019-06-12

Version: 01.0

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier

Product name: PERSIL LIQUID DETERGENT

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

1.2 Recommended use and restrictions on use

Identified uses:

Laundry liquid detergent

Restrictions of use:

Uses other than those identified are not recommended

1.3 Details of the supplier

DIVERSEY NEW ZEALAND LTD.

24 Bancroft Crescent, Glendene, Auckland, 0602, New Zealand

Telephone: 0800 803 615 (toll free)

Website: www.diversey.com

1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible)

Call 0800 243 622 (24 hrs)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

HSNO Classification

6.1E - Acutely toxic (oral)

6.3B - Mildly irritating to the skin

8.3A - Corrosive to ocular tissue

9.1D - Slightly harmful to the aquatic environment or are otherwise designed for biocidal action

9.3C - Harmful to terrestrial vertebrates

GHS Equivalent Classification

Acute toxicity, oral, Category 5

Skin irritation, Category 3

Serious eye damage, Category 1

Acute aquatic toxicity, Category 2

Terrestrial vertebrates, Category 3

2.2 Label elements



Signal word: Danger

Hazard statements:

H303 - May be harmful if swallowed.

H316 - Causes mild skin irritation.

H318 - Causes serious eye damage.

H401 - Toxic to aquatic life.

H433 - Harmful to terrestrial vertebrates.

Prevention statement(s):

P233 - Keep container tightly closed.

P280 - Wear eye or face protection.

Response statement(s):

PERSIL LIQUID DETERGENT

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTRE, doctor or physician.

Disposal statement(s):

P501 - Dispose of unused content as chemical waste.

2.3 Other hazards

No other hazards known.

SECTION 3: Composition/information on ingredients**3.1 Substances / Mixtures**

Ingredient(s)	CAS number	EC number	Weight percent
Alcohols, C12-14, ethoxylated	68439-50-9	500-213-3	10-30
sodium alkylbenzenesulphonate	68411-30-3	270-115-0	3-10
Poly(oxy-1,2-ethanediyl), ..alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts	68891-38-3	500-234-8	3-10
glycerol	56-81-5	200-289-5	1-3
2-methyl-2H-isothiazol-3-one	2682-20-4	220-239-6	0.01-0.1

Non-hazardous ingredients are the remainder and add up to 100%.

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

SECTION 4: First aid measures**4.1 Description of first aid measures****Inhalation:**

Remove person to fresh air and keep comfortable for breathing.

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. Immediately call a POISON CENTRE, doctor or physician.

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.

First aid facilities:

Eyewash facilities should be considered in a workplace where necessary.

4.2 Most important symptoms and effects, both acute and delayed**Inhalation:**

No known effects or symptoms in normal use.

Skin contact:

No known effects or symptoms in normal use.

Eye contact:

Causes severe or permanent damage.

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.

Poison Information Center: Call 0800 764 766 (0800 POISON)

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.

5.4 Hazchem code

None allocated

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Wear eye/face protection.

PERSIL LIQUID DETERGENT

6.2 Environmental precautions

Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. Dilute with plenty of water. 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, sawdust). Do not place spilled materials back into the original container. Collect in closed and suitable containers for disposal.

6.4 Reference to other sections

For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage**7.1 Precautions for safe handling****Measures to prevent fire and explosions:**

No special precautions required.

Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

Advices on general occupational hygiene:

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless advised by Diversey. Wash hands before breaks and at the end of workday. Avoid contact with 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. 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:

Ingredient(s)	Long term value(s)	Short term value(s)	Ceiling value(s)
glycerol	10 mg/m ³		

Biological limit values, if 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: No special requirements under normal use conditions.
Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

Personal protective equipment

Eye / face protection: Safety glasses or goggles (EN 166).
Hand protection: No special requirements under normal use conditions.
Body protection: No special requirements under normal use conditions.
Respiratory protection: No special requirements under normal use conditions.

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

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Physical State: Liquid
Colour: Clear, Blue
Odour: Product specific
Odour threshold: Not applicable

Method / remark

PERSIL LIQUID DETERGENT

pH: ≈ 8 (neat)

Melting point/freezing point (°C): Not determined**Initial boiling point and boiling range (°C):** Not determined**Flammability (liquid):** Not flammable.**Flash point (°C):** Not determined**Sustained combustion:** Not applicable.

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

Evaporation rate: Not determined**Flammability (solid, gas):** Not applicable to liquids**Upper/lower flammability limit (%):** Not determined**Vapour pressure:** Not determined**Vapour density:** Not determined**Relative density:** ≈ 1.03 (20 °C)**Solubility in / Miscibility with Water:** Fully miscible**Partition coefficient: n-octanol/water** No information available.

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

Autoignition temperature: Not determined**Decomposition temperature:** Not applicable.**Viscosity:** ≈ 450 mPa.s (20 °C)**Explosive properties:** Not explosive.**Oxidising properties:** Not oxidising

ISO 4316

Not relevant to classification of this product

Not relevant to classification of this product

Not relevant to classification of this product

OECD 109 (EU A.3)

9.2 Other information**Surface tension (N/m):** Not determined**Corrosion to metals:** Not corrosive**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 toxicological effects**

Mixture data:.

Relevant calculated ATE(s):

ATE - Oral (mg/kg): 3800

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)
Alcohols, C12-14, ethoxylated		No data available			
sodium alkylbenzenesulphonate	LD ₅₀	1080	Rat	OECD 401 (EU B.1)	
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts		No data available			
glycerol	LD ₅₀	12600	Rat	Method not given	
2-methyl-2H-isothiazol-3-one	LD ₅₀	> 2000	Rat	OECD 423 (EU B.1 tris)	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure
---------------	----------	-------	---------	--------	----------

PERSIL LIQUID DETERGENT

		(mg/kg)			time (h)
Alcohols, C12-14, ethoxylated		No data available			
sodium alkylbenzenesulphonate	LD ₅₀	> 2000	Rat	OECD 402 (EU B.3)	
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts		No data available			
glycerol	LD ₅₀	> 10000	Rabbit	Method not given	
2-methyl-2H-isothiazol-3-one	LD ₅₀	> 2000	Rat	OECD 402 (EU B.3)	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Alcohols, C12-14, ethoxylated		No data available			
sodium alkylbenzenesulphonate		No data available			
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts		No data available			
glycerol		> 2.75	Rat	Weight of evidence	4 Hrs.
2-methyl-2H-isothiazol-3-one		No data available			

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
Alcohols, C12-14, ethoxylated	No data available			
sodium alkylbenzenesulphonate	Irritant	Rabbit	OECD 404 (EU B.4)	
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts	No data available			
glycerol	Not irritant		OECD 404 (EU B.4)	
2-methyl-2H-isothiazol-3-one	Corrosive			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
Alcohols, C12-14, ethoxylated	No data available			
sodium alkylbenzenesulphonate	Corrosive	Rabbit	OECD 405 (EU B.5)	
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts	No data available			
glycerol	Not corrosive or irritant		Method not given	
2-methyl-2H-isothiazol-3-one	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
Alcohols, C12-14, ethoxylated	No data available			
sodium alkylbenzenesulphonate	Not irritating to respiratory tract			
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts	No data available			
glycerol	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)
Alcohols, C12-14, ethoxylated	No data available			
sodium alkylbenzenesulphonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts	No data available			
glycerol	Not sensitising	Human	Human repeated patch test	
2-methyl-2H-isothiazol-3-one	Sensitising	Guinea pig		

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
Alcohols, C12-14, ethoxylated	No data available			
sodium alkylbenzenesulphonate	No data available			
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts	No data available			
glycerol	No data available			
2-methyl-2H-isothiazol-3-one	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

PERSIL LIQUID DETERGENT

Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
Alcohols, C12-14, ethoxylated	No data available		No data available	
sodium alkylbenzenesulphonate	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) OECD 476 OECD 473	No data available	
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts	No data available		No data available	
glycerol	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	
2-methyl-2H-isothiazol-3-one	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	

Carcinogenicity

Ingredient(s)	Effect
Alcohols, C12-14, ethoxylated	No data available
sodium alkylbenzenesulphonate	No data available
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts	No data available
glycerol	No evidence for carcinogenicity, negative test results
2-methyl-2H-isothiazol-3-one	No data available

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
Alcohols, C12-14, ethoxylated			No data available				
sodium alkylbenzenesulphonate	NOAEL	Teratogenic effects	300	Rat	Non guideline test		No known significant effects or critical hazards
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts			No data available				
glycerol			No data available				Not toxic for reproduction
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
Alcohols, C12-14, ethoxylated		No data available				
sodium alkylbenzenesulphonate		No data available				
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts		No data available				
glycerol		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
Alcohols, C12-14, ethoxylated		No data available				
sodium alkylbenzenesulphonate		No data available				
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts		No data available				
glycerol		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
Alcohols, C12-14, ethoxylated		No data available				
sodium alkylbenzenesulphonate		No data available				
Poly(oxy-1,2-ethanediyl),		No data				

PERSIL LIQUID DETERGENT

.alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts		available				
glycerol		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
Alcohols, C12-14, ethoxylated			No data available					
sodium alkylbenzenesulphonate			No data available					
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts			No data available					
glycerol			No data available					
2-methyl-2H-isothiazol-3-one			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
Alcohols, C12-14, ethoxylated	No data available
sodium alkylbenzenesulphonate	No data available
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts	No data available
glycerol	No data available
2-methyl-2H-isothiazol-3-one	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
Alcohols, C12-14, ethoxylated	No data available
sodium alkylbenzenesulphonate	No data available
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts	No data available
glycerol	No data available
2-methyl-2H-isothiazol-3-one	No data available

Aspiration hazard

Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

Potential adverse health effects and symptoms

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

SECTION 12: Ecological information

12.1 Toxicity

No data is available on the mixture.

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

Aquatic short-term toxicity

Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Alcohols, C12-14, ethoxylated		No data available			
sodium alkylbenzenesulphonate	LC ₅₀	1.67	Fish	EPA-OPPTS 850.1075	96
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts		No data available			
glycerol	LC ₅₀	54000	<i>Oncorhynchus mykiss</i>	Method not given	96
2-methyl-2H-isothiazol-3-one		No data available			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Alcohols, C12-14, ethoxylated		No data available			

PERSIL LIQUID DETERGENT

sodium alkylbenzenesulphonate	LC ₅₀	2.9	<i>Daphnia</i>	OECD 202 (EU C.2)	48
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts		No data available			
glycerol	EC ₅₀	> 10000	<i>Daphnia magna</i> Straus	Method not given	24
2-methyl-2H-isothiazol-3-one		No data available			

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Alcohols, C12-14, ethoxylated		No data available			
sodium alkylbenzenesulphonate	E _b C ₅₀	47.3	<i>Not specified</i>	Non guideline test	72
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts		No data available			
glycerol		No data available			-
2-methyl-2H-isothiazol-3-one		No data available			

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
Alcohols, C12-14, ethoxylated		No data available			
sodium alkylbenzenesulphonate		No data available			
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts		No data available			
glycerol		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
Alcohols, C12-14, ethoxylated		No data available			
sodium alkylbenzenesulphonate	EC ₅₀	550	<i>Bacteria</i>	OECD 209	3 hour(s)
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts		No data available			
glycerol	EC ₅₀	> 10000	<i>Pseudomonas putida</i>	Method not given	16 hour(s)
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
Alcohols, C12-14, ethoxylated		No data available				
sodium alkylbenzenesulphonate	NOEC	0.23	<i>Oncorhynchus mykiss</i>	Method not given	72 day(s)	
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts		No data available				
glycerol		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
Alcohols, C12-14, ethoxylated		No data available				
sodium alkylbenzenesulphonate	NOEC	1.41	<i>Daphnia magna</i>	OECD 211		
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts		No data available				
glycerol		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	Species	Method	Exposure	Effects observed
---------------	----------	-------	---------	--------	----------	------------------

PERSIL LIQUID DETERGENT

		(mg/kg dw sediment)			time (days)	
Alcohols, C12-14, ethoxylated		No data available				
sodium alkylbenzenesulphonate		No data available				
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts		No data available				
glycerol		No data available			-	
2-methyl-2H-isothiazol-3-one		No data available				

Terrestrial toxicity

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

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
glycerol		No data available			-	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
glycerol		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
glycerol		No data available			-	

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
glycerol		No data available			-	

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
glycerol		No data 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
Alcohols, C12-14, ethoxylated				OECD 301F	Readily biodegradable
sodium alkylbenzenesulphonate	Activated sludge, aerobe	CO ₂ production	85 % in 28 day(s)	OECD 301B	Readily biodegradable
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts				OECD 301D	Readily biodegradable
glycerol			60% in 28 day(s)	Method not given	Readily biodegradable
2-methyl-2H-isothiazol-3-one					Not readily biodegradable.

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

Ingredient(s)	Medium & Type	Analytical method	DT ₅₀	Method	Evaluation
2-methyl-2H-isothiazol-3-one	Surface water (fresh)	Mineralisation rate	> 50 % in 4 day(s)	OECD 309	Biodegradable

12.3 Bioaccumulative potential

PERSIL LIQUID DETERGENT

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
Alcohols, C12-14, ethoxylated	No data available			
sodium alkylbenzenesulphonate	3.32	Method not given	Low potential for bioaccumulation	
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts	No data available			
glycerol	-1.76	Method not given	No bioaccumulation expected	
2-methyl-2H-isothiazol-3-one	-0.32	OECD 107	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
Alcohols, C12-14, ethoxylated	No data available				
sodium alkylbenzenesulphonate	2-1000		Method not given	High potential for bioaccumulation	
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts	No data available				
glycerol	No data available				
2-methyl-2H-isothiazol-3-one	3.16		OECD 305		

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
Alcohols, C12-14, ethoxylated	No data available				
sodium alkylbenzenesulphonate	No data available				
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts	No data available				
glycerol	No data available				Potential for mobility in soil, soluble in water
2-methyl-2H-isothiazol-3-one	No data available				

12.5 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.

Empty packaging

Recommendation:

Dispose of observing national or local regulations.

Suitable cleaning agents:

Water, if necessary with cleaning agent.

SECTION 14: Transport information

ADG, IMO/IMDG, ICAO/IATA

14.1 UN number: Non-dangerous goods

14.2 UN proper shipping name: Non-dangerous goods

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

14.4 Packing group: Non-dangerous goods

14.5 Environmental hazards: Non-dangerous goods

Environmentally hazardous: No

Marine pollutant: No

14.6 Special precautions for user: Non-dangerous goods

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: The product is not transported in bulk tankers.

Non-dangerous goods

Other relevant information:

Hazchem code: None allocated

This product has been classified, labelled and package in accordance with the requirements of the NZ Land Transport Rule: Dangerous Goods, ADG, and the provisions of the IMDG Code.

Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

SECTION 15: Regulatory information

PERSIL LIQUID DETERGENT

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

HSNO Approval Number	HSR002530.
Group standard	Cleaning Products (Subsidiary Hazard) Group Standard 2017
Inventory Listing(s)	New Zealand: NZIoC (New Zealand Inventory of Chemicals) All components are listed on the NZIoC inventory, or are exempt

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: MS32000609

Version: 01.0

Revision: 2019-06-12

Exposure standards - Time Weighted Average (TWA) or Workplace Exposure Standard (WES) (NZ): Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

Abbreviations and acronyms:

- DNEL - Derived No Effect Limit
- AUH - GHS Specific hazard statement
- PNEC - Predicted No Effect Concentration
- ATE - Acute Toxicity Estimate
- LD50 - Lethal Dose, 50% / Median Lethal dose
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- EC50 - effective concentration, 50%
- NOEL - No observed effect level
- NOAEL - No observed adverse effect level
- STOT-RE - Specific target organ toxicity (repeated exposure)
- STOT-SE - Specific target organ toxicity (single exposure)
- EC No. - European Community Number
- OECD - Organization for Economic Cooperation and Development

End of Safety Data Sheet