Diversey

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Endbac Sanitising Wipes

Revision: 2022-12-13 **Version:** 01.1

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

1.1 Product identifier

Trade name: Endbac Sanitising Wipes

UFI: DV57-Q0DK-Q00M-WM78

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

Product use: Hard surface cleaner.
Surface disinfectant.

for food contact surface disinfection

For professional use only.

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

SWED - Sector-specific worker exposure description :

AISE_SWED_PW_10_1 AISE_SWED_PW_19_1

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

Aquatic Chronic 3 (H412)

2.2 Label elements

Contains 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) (Methylchloroisothiazolinone, Methylisothiazolinone), poly (hexamethylenebiguanide) hydrochloride (Polyaminopropyl Biguanide)

Hazard statements:

H412 - Harmful to aquatic life with long lasting effects.

EUH208 - May produce an allergic reaction.

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
ethanol	200-578-6	64-17-5	[6]	Flam. Liq. 2 (H225)		10-20
didecyldimethylammonium chloride	230-525-2	7173-51-5	[6]	Skin Corr. 1B (H314) Acute Tox. 4 (H302) Eye Dam. 1 (H318) Aquatic Acute 1 M=10 (H400)		0.1-1

				Aquatic Chronic 2 (H411)	
poly (hexamethylenebiguanide) hydrochloride	[4]	27083-27-8	[6]	Acute Tox. 2 (H330) Carc. 2 (H351) STOT RE 1 (H372) Acute Tox. 4 (H302) Eye Dam. 1 (H318) Skin Sens. 1B (H317) Aquatic Acute 1 M=10 (H400) Aquatic Chronic 1 M=10 (H410)	0.1-1
2-methyl-2H-isothiazol-3-one	220-239-6	2682-20-4	[6]	Acute Tox. 2 (H330) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Skin Sens. 1A (H317) Aquatic Acute 1 M=10 (H400) Aquatic Chronic 1 (H410)	0.1-1
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	220-239-6 247-500-7	55965-84-9	[6]	Acute Tox. 2 (H310) Acute Tox. 2 (H330) Acute Tox. 3 (H301) Skin Corr. 1C (H314) EUH071 Eye Dam. 1 (H318) Skin Sens. 1A (H317) Aquatic Acute 1 M=100 (H400) Aquatic Chronic 1 M=100 (H410)	< 0.01

Specific concentration limits

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

• Skin Sens. 1 (H317) >= 0.0015%

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

• Skin Sens. 1 (H317) >= 0.0015%

• Eye Dam. 1 (H318) >= 0.6% > Eye Irrit. 2 (H319) >= 0.06%

• Skin Corr. 1C (H314) >= 0.6% > Skin Irrit. 2 (H315) >= 0.06%

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

ATE, if available, are listed in section 11

[4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.

[6] Exempted: biocidal active. See Article 15(2) of Regulation (EC) No 1907/2006.

For the full text of the H and EUH phrases mentioned in this Section, see Section 16...

SECTION 4: First aid measures

4.1 Description of first aid measures

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

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

or attention.

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

attention.

Ingestion: Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious

person. Get medical attention or advice if you feel unwell.

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

4.2 Most important symptoms and effects, both acute and delayed

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

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Carbon dioxide. Dry powder. Sand. Alcohol-resistant foam. Do not use water.

5.2 Special hazards arising from the substance or mixture

No special hazards known.

5.3 Advice for firefighters

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

No special measures required.

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and material for containment and cleaning up

No special measures required.

6.4 Reference to other sections

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Measures to prevent fire and explosions:

No special precautions required.

Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

Advices on general occupational hygiene:

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless adviced by Diversey. Wash hands before breaks and at the end of workday. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging. Keep from freezing. Keep away from heat and direct sunlight.

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)	UK - Long term value(s)	UK - Short term value(s)
ethanol	1000 ppm	3000 ppm
	1920 mg/m ³	5760 mg/m ³

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
ethanol	-	-	-	87
didecyldimethylammonium chloride	-	-	-	-
poly (hexamethylenebiguanide) hydrochloride	No data available	No data available	No data available	No data available
2-methyl-2H-isothiazol-3-one	-	-	-	0.027
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	-	-	-	-

DNEL/DMEL dermal exposure - Worker

Ingredient(s)	Short term - Local	Short term - Systemic	Long term - Local	Long term - Systemic
	effects	effects (mg/kg bw)	effects	effects (mg/kg bw)

ethanol	•	-	-	343
didecyldimethylammonium chloride	-	-	-	8.6
poly (hexamethylenebiguanide) hydrochloride	No data available	No data available	No data available	No data available
2-methyl-2H-isothiazol-3-one	-	-	-	-
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	-	-	-	-

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)
ethanol	-	-	-	206
didecyldimethylammonium chloride	-	-	-	-
poly (hexamethylenebiguanide) hydrochloride	No data available	No data available	No data available	No data available
2-methyl-2H-isothiazol-3-one	-	-	-	-
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	-	-	-	-

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
ethanol	1900	-	-	950
didecyldimethylammonium chloride	-	-	=	18.2
poly (hexamethylenebiguanide) hydrochloride	No data available	No data available	No data available	No data available
2-methyl-2H-isothiazol-3-one	-	-	-	-
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	-	-	-	-

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
ethanol	950	-	-	114
didecyldimethylammonium chloride	-	-	-	-
poly (hexamethylenebiguanide) hydrochloride	No data available	No data available	No data available	No data available
2-methyl-2H-isothiazol-3-one	-	-	-	-
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	-	-	-	-

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)
ethanol	0.96	0.79	2.75	580
didecyldimethylammonium chloride	0.002	0.0002	0.00029	0.595
poly (hexamethylenebiguanide) hydrochloride	No data available	No data available	No data available	No data available
2-methyl-2H-isothiazol-3-one	-	-	-	-
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	-	-	-	-

Environmental exposure PNEC continued

Environmental exposure - PNEC, continued				
Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
ethanol	3.6	2.9	0.63	-
didecyldimethylammonium chloride	2.82	0.282	1.4	-
poly (hexamethylenebiguanide) hydrochloride	No data available	No data available	No data available	No data available
2-methyl-2H-isothiazol-3-one	-	-	-	-
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	-	-	-	-

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 <u>undiluted</u> product:

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

REACH use scenarios considered for the undiluted product:

	SWED - Sector-specific worker exposure description	LCS	PROC	Duration (min)	ERC
Manual application by wet wipe	AISE_SWED_PW_10_1	PW	PROC 10	480	ERC8a
Manual application	AISE SWED PW 19 1	PW	PROC 19	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 Appearance: Creamy Colour: Clear , White 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)
ethanol	78.4	Method not given	
didecyldimethylammonium chloride	110		
poly (hexamethylenebiguanide) hydrochloride	102	Method not given	
2-methyl-2H-isothiazol-3-one	No data available		
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available		

Method / remark

Flammability (solid, gas): Not applicable to liquids

Flammability (liquid): Not flammable.

Flash point (°C): ≈ 46 °C

Sustained combustion: The product does not sustain combustion

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

Lower and upper explosion limit/flammability limit (%): Not determined

closed cup

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

Substance data, flammability or explosive limits, if available:

Method / remark

Autoignition temperature: Not determined **Decomposition temperature:** Not applicable.

pH: ≈ 6 (neat)
Kinematic viscosity: Not determined

ISO 4316

Solubility in / Miscibility with water: Not miscible or difficult to mix

Substance data, solubility in water

Substance data, solubility in water			
Ingredient(s)	Value (g/l)	Method	Temperature (°C)
ethanol	No data available		
didecyldimethylammonium chloride	No data available		
poly (hexamethylenebiguanide) hydrochloride	Soluble		
2-methyl-2H-isothiazol-3-one	No data available		
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available		

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

Method / remark

See substance data

Substance data, vapour pressure

Vapour pressure: Not determined

Ingredient(s)	Value	Method	Temperature

	(Pa)		(°C)
ethanol	5800	Method not given	
didecyldimethylammonium chloride	No data available		
poly (hexamethylenebiguanide) hydrochloride	No data available		
2-methyl-2H-isothiazol-3-one	No data available		
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available		

Method / remark

OECD 109 (EU A.3)

Not relevant to classification of this product

Not applicable to liquids.

Relative density: $\approx 1.00 (20 \,^{\circ}\text{C})$

Relative vapour density: No data available. Particle characteristics: No data available.

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Explosive properties: Not explosive. Vapours may form explosive mixtures with air.

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 toxicological effects

Mixture data:.

Relevant calculated ATE(s):

ATE - Oral (mg/kg): >2000 ATE - Dermal (mg/kg): >2000 ATE - Inhalatory, mists (mg/l): >0.5

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

Acute toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
ethanol	LD 50	5000	Rat	OECD 401 (EU B.1)	, ,	Not established
didecyldimethylammonium chloride	LD 50	238	Rat	Method not given		100000
poly (hexamethylenebiguanide) hydrochloride	LD 50	501	Rat	Method not given		250000
2-methyl-2H-isothiazol-3-one	LD 50	120	Rat	OECD 401 (EU B.1)		100000
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	LD 50	64	Rat	Method not given		4.5e+006

Acute dermal toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	ATE
		(mg/kg)			time (h)	(mg/kg)
ethanol	LD 50	> 10000	Rabbit	OECD 402 (EU B.3)		Not established
didecyldimethylammonium chloride		No data available				500000
poly (hexamethylenebiguanide) hydrochloride	LD 50	> 5000	Rat	Method not given		Not established
2-methyl-2H-isothiazol-3-one	LD 50	242	Rat	OECD 402 (EU B.3)	24 hours	240000
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	LD 50	87.12	Rabbit	Method not given		3.5e+006

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
ethanol	LC 50	> 1800	Rat	Non guideline test	4
didecyldimethylammonium chloride		No data available			
poly (hexamethylenebiguanide) hydrochloride	LC 50	0.37 (mist)	Rat	Method not given	4
2-methyl-2H-isothiazol-3-one	LC 50	(mist) 0.11	Rat	OECD 403 (EU B.2)	4 hours
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	LC 50	0.33	Rat		

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)
ethanol	Not established	Not established	Not established	Not established
didecyldimethylammonium chloride	Not established	Not established	Not established	Not established
poly (hexamethylenebiguanide) hydrochloride	Not established	1500	Not established	Not established
2-methyl-2H-isothiazol-3-one	Not established	110	Not established	Not established
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	Not established	14000	Not established	Not established

Irritation and corrosivity Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
ethanol	Not irritant	Rabbit	OECD 404 (EU B.4)	
didecyldimethylammonium chloride	Corrosive	Rabbit	OECD 404 (EU B.4)	
poly (hexamethylenebiguanide) hydrochloride	No data available			
2-methyl-2H-isothiazol-3-one	Corrosive			
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	Corrosive		Method not given	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
ethanol	Irritant	Rabbit	OECD 405 (EU B.5)	
didecyldimethylammonium chloride	Severe damage			
poly (hexamethylenebiguanide) hydrochloride	Severe damage	Rabbit		
2-methyl-2H-isothiazol-3-one	No data available			
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	Severe damage		Method not given	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
ethanol	No data available			
didecyldimethylammonium chloride	No data available			
poly (hexamethylenebiguanide) hydrochloride	No data available			
2-methyl-2H-isothiazol-3-one	No data available			
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available			

Sensitisation Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
ethanol	Not sensitising			
didecyldimethylammonium chloride	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	
poly (hexamethylenebiguanide) hydrochloride	Sensitising			
2-methyl-2H-isothiazol-3-one	Sensitising	Guinea pig		
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	Sensitising	Guinea pig	Method not given OECD 406 (EU B.6) / GPMT	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
ethanol	No data available			
didecyldimethylammonium chloride	No data available			
poly (hexamethylenebiguanide) hydrochloride	No data available			
2-methyl-2H-isothiazol-3-one	No data available			
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
ethanol	No data available		No data available	
		OECD 471 (EU B.12/13) OECD 473 OECD 476		
poly (hexamethylenebiguanide) hydrochloride	No data available		No data available	
,	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No evidence for mutagenicity	Method not given	No data available	

Carcinogenicity

Ingredient(s)	Effect
ethanol	No data available
didecyldimethylammonium chloride	No data available
poly (hexamethylenebiguanide) hydrochloride	Limited evidence of a carcinogenic effect.
2-methyl-2H-isothiazol-3-one	No data available
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No evidence for carcinogenicity, negative test results

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
ethanol			No data available				
didecyldimethylammoni um chloride			No data available				
poly (hexamethylenebiguani de) hydrochloride			No data available				
2-methyl-2H-isothiazol- 3-one			No data available				
5-chloro-2-methyl-2H-is othiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol- 3-one [EC No			No data available				No evidence for reproductive toxicity No evidence for teratogenic effects

Repeated dose toxicity
Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	
ethanol		No data available				
didecyldimethylammonium chloride		No data available				
poly (hexamethylenebiguanide) hydrochloride		No data available				
2-methyl-2H-isothiazol-3-one		No data available				
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		No data available				

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
ethanol		No data				
		available				
didecyldimethylammonium chloride		No data				

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

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
ethanol		No data available				
didecyldimethylammonium chloride		No data available				
poly (hexamethylenebiguanide) hydrochloride		No data available				
2-methyl-2H-isothiazol-3-one		No data available				
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		No data available				

Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
ethanol			No data					
			available					
didecyldimethylammoni			No data					
um chloride			available					
poly			No data					
(hexamethylenebiguani			available					
de) hydrochloride								
2-methyl-2H-isothiazol-			No data					
3-one			available					
5-chloro-2-methyl-2H-is			No data					
othiazol-3-one [EC No			available					
247-500-7] and								
2-methyl-2H-isothiazol-								
3-one [EC No								
220-239-6] (3:1)								

STOT-single exposure

Ingredient(s)	Affected organ(s)
ethanol	No data available
didecyldimethylammonium chloride	No data available
poly (hexamethylenebiguanide) hydrochloride	No data available
2-methyl-2H-isothiazol-3-one	No data available
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
ethanol	No data available
didecyldimethylammonium chloride	No data available
poly (hexamethylenebiguanide) hydrochloride	Respiratory tract
2-methyl-2H-isothiazol-3-one	No data available
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and	No data available
2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	

Aspiration hazard

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

Potential adverse health effects and symptomsEffects 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

Aquatic	short-term	toxicity	/ - fish
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Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
ethanol	LC 50	8150	Alburnus alburnus	Method not given	96
didecyldimethylammonium chloride	LC 50	0.97	Brachydanio rerio	OECD 203 (EU C.1)	96
poly (hexamethylenebiguanide) hydrochloride	LC 50	0.026	Oncorhynchus mykiss	OECD 203, flow-through	96
2-methyl-2H-isothiazol-3-one	LC 50	4.77	Oncorhynchus mykiss	Similar to OECD 203	96
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	LC 50	0.28	Lepomis macrochirus	OECD 203 (EU C.1)	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
ethanol	EC 50	5012	Daphnia magna Straus	Method not given	48
didecyldimethylammonium chloride	EC 50	0.053	Daphnia magna Straus	OECD 202 (EU C.2)	48
poly (hexamethylenebiguanide) hydrochloride	EC 50	0.09	Daphnia magna Straus	OECD 202 (EU C.2)	48
2-methyl-2H-isothiazol-3-one	LC 50	0.93-1.9	Daphnia magna Straus	Method not given	48
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	EC 50	0.126	Daphnia magna Straus	OECD 202 (EU C.2)	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
ethanol	EC 50	675	Scenedesmus quadricauda Not specified	Method not given	72
didecyldimethylammonium chloride	EC 50	0.053	Pseudokirchner iella subcapitata	OECD 201 (EU C.3)	72
poly (hexamethylenebiguanide) hydrochloride	Er C 50	0.0191	Pseudokirchner iella subcapitata	OECD 201 (EU C.3)	72
2-methyl-2H-isothiazol-3-one	EC 50	0.158	Selenastrum capricornutum	Method not given	72
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	EC 50	0.003	Pseudokirchner iella subcapitata	OECD 201 (EU C.3)	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
ethanol		No data available			
didecyldimethylammonium chloride		No data available			
poly (hexamethylenebiguanide) hydrochloride		No data available			
2-methyl-2H-isothiazol-3-one		No data available			
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)		Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
ethanol		EC₀	6500	Pseudomonas putida	Method not given	16 hour(s)
didecyldimethylammoniur	n chloride		No data available			
poly (hexamethylenebiguanide) hydrochloride	EC 50	38	Bacteria	Method not given	4 hour(s)

2-methyl-2H-isothiazol-3-one	EC 20	2.8	Activated sludge	OECD 209	3 hour(s)
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	EC 20	0.97	Activated sludge	OECD 209	3 hour(s)

Aquatic long-term toxicity

Aquatic long-term to	xicity - fish
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Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
		(mg/l)			time	
ethanol		No data				
		available				
didecyldimethylammonium chloride		No data				
		available				
poly (hexamethylenebiguanide) hydrochloride		No data				
		available				
2-methyl-2H-isothiazol-3-one		No data				
•		available				
5-chloro-2-methyl-2H-isothiazol-3-one [EC No		No data				
247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No		available				
220-239-6] (3:1)					1	

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
ethanol		No data available				
didecyldimethylammonium chloride	NOEC	> 0.01-0.1	Daphnia magna	OECD 211	21 day(s)	
poly (hexamethylenebiguanide) hydrochloride	NOEC	0.0084	Daphnia magna	OECD 211, semi-static	21 day(s)	
2-methyl-2H-isothiazol-3-one		No data available				
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		No data available				

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

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

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

Terrestrial toxicity - plants, if available:

refrestrial toxicity plants, if available.		•				•
Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
• • • • • • • • • • • • • • • • • • • •	•	(mg/kg dw			time (davs)	
					unic (days)	
		soil)				
didecyldimethylammonium chloride		No data				
		available				
5-chloro-2-methyl-2H-isothiazol-3-one [EC No		No data				
247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No		available				
220-239-61 (3:1)						

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
					time (days)	

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

Terrestrial toxicity - beneficial insects, if available:

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

Terrestrial toxicity - soil bacteria, if available:

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

12.2 Persistence and degradability

Abiotic degradation
Abiotic degradation - photodegradation in air, if available:

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

Abiotic degradation - hydrolysis, if available:

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

Abiotic degradation - other processes, if available:

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

Biodegradation

Ready biodegradability - aerobic conditions					
Ingredient(s)	Inoculum	Analytical method	DT 50	Method	Evaluation
ethanol	Activated sludge, aerobe	Oxygen depletion	> 60% in 10 day(s)	OECD 301B	Readily biodegradable
didecyldimethylammonium chloride		Oxygen depletion	> 60%	OECD 301D	Readily biodegradable
poly (hexamethylenebiguanide) hydrochloride					Not readily biodegradable.
2-methyl-2H-isothiazol-3-one				Other	Readily biodegradable
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		Oxygen depletion	> 60%	OECD 301D	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

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

Degradation in relevant environmental compartments, if available:

Ingredient(s)	Medium & Type	Analytical method	DT 50	Method	Evaluation
didecyldimethylammonium chloride					No data available
2-methyl-2H-isothiazol-3-one	Surface water (fresh)	Mineralisation rate	> 50 % in 4 day(s)	OECD 309	Biodegradable
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)					No data available

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
ethanol	-0.31	Weight of evidence	No bioaccumulation expected	
didecyldimethylammonium chloride	No data available			
poly (hexamethylenebiguanide) hydrochloride	No data available		No bioaccumulation expected	
2-methyl-2H-isothiazol-3-one	-0.32	OECD 107	No bioaccumulation expected	
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	-0.71 - +0.75	Method not given	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
ethanol	0.5		Weight of evidence	No bioaccumulation expected	
didecyldimethylammoni um chloride	2.1		Method not given	No bioaccumulation expected	
poly (hexamethylenebiguani de) hydrochloride	No data available			No bioaccumulation expected	
2-methyl-2H-isothiazol- 3-one	3.16		OECD 305		
5-chloro-2-methyl-2H-is othiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol- 3-one [EC No 220-239-6] (3:1)					

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
ethanol	No data available				
didecyldimethylammonium chloride	No data available				
poly (hexamethylenebiguanide) hydrochloride	No data available				Potential for adsorption to soil
2-methyl-2H-isothiazol-3-one	No data available				
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available				

12.5 Results of PBT and vPvB assessment

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

12.6 Endocrine disrupting properties

Endocrine disrupting properties - Environmental effects, if available:

12.7 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods Waste from residues / unused

products:

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

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

Empty packaging

Recommendation: Dispose of observing national or local regulations.

SECTION 14: Transport information

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

14.1 UN number: Non-dangerous goods

14.2 UN proper shipping name: Non-dangerous goods 14.3 Transport hazard class(es): Non-dangerous goods

14.4 Packing group: Non-dangerous goods

14.5 Environmental hazards: Non-dangerous goods

14.6 Special precautions for user: Non-dangerous goods

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

SECTION 15: Regulatory information

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

National regulations:

- Regulation (EC) 1907/2006 REACH (UK amended)
- Regulation (EC) 1272/2008 CLP (UK amended)
- Regulation (EC) 648/2004 Detergents regulation (UK amended)
- Biocidal Products Regulations 2001 (SI 2001/880)
- 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

cationic surfactants

< 5 %

disinfectants, Methylisothiazolinone, 2-Bromo-2-Nitropropane-1,3-Diol, Methylchloroisothiazolinone, Methylisothiazolinone

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: MS1003894 Version: 01.1 Revision: 2022-12-13

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):, 1, 3, 6, 7, 8, 9, 11, 12, 15, 16

Classification procedure

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

Full text of the H and EUH phrases mentioned in section 3:

- H225 Highly flammable liquid and vapour.H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H310 Fatal in contact with skin.
- H311 Toxic in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- · H318 Causes serious eye damage.

- H330 Fatal if inhaled. H351 Suspected of causing cancer.
- + H371 Suspected or causing cartier.
 + H372 Causes damage to organs through prolonged or repeated exposure.
 + H400 Very toxic to aquatic life.
 + H410 Very toxic to aquatic life with long lasting effects.
 + H411 Toxic to aquatic life with long lasting effects.
 + EUH071 Corrosive to the respiratory tract.

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%

- 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

End of Safety Data Sheet