Safety Data Sheet

According to Regulation (EC) No 1907/2006

Deosan Mastocide

Revision: 2024-08-05 **Version:** 01.2

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

1.1 Product identifier

Trade name: Deosan Mastocide

UFI: 7G97-Y0D8-K00D-PXPY

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

Product use: Teat dip.
for general 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_13_2
AISE_SWED_PW_19_1

1.3 Details of the supplier of the safety data sheet

Diversey Europe Operations BV, De Corridor 4, 3621ZB Breukelen [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@solenis.com

1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible)
For medical or environmental emergency only:
call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Chronic aquatic toxicity, Category 2 (H411)

2.2 Label elements

Hazard statements:
H411 - Toxic to aquatic life with long lasting effects.

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
propane-1,2-diol	200-338-0	57-55-6	01-2119456809-23	Not classified as hazardous		3-10
glycerol	200-289-5	56-81-5	01-2119471987-18	Not classified as hazardous		1-3
sodium lactate	200-772-0	72-17-3	[1]	Eye irritation, Category 2 (H319)		1-3

chlorhexidine digluconate	242-354-0	18472-51-0	[6]	Serious eye damage, Category 1 (H318) Acute aquatic toxicity, Category 1 M=10 (H400) Chronic aquatic toxicity, Category 1 M=1 (H410)		0.1-1

Workplace exposure limit(s), if available, are listed in subsection 8.1.
ATE, if available, are listed in section 11.
[1] Exempted: ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required.
[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. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture

No special hazards known.

5.3 Advice for firefighters

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

No special measures required.

6.2 Environmental precautions

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:

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. 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)
propane-1,2-diol	150 ppm total vapour and particulates 474 mg/m³ total vapour and particulates 10 mg/m³ particulates	450 ppm total vapour and particulates 1422 mg/m³ total vapour and particulates 30 mg/m³ particulate
glycerol	10 mg/m³ mist	30 mg/m³ mist

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
propane-1,2-diol	-	-	-	-
glycerol	-	-	-	229
sodium lactate	-	-	-	-
chlorhexidine digluconate	-	-	-	.03

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)
propane-1,2-diol	-	-	-	-
glycerol	No data available	-	No data available	-
sodium lactate	-	-	-	-
chlorhexidine digluconate	-	-	-	-

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)
propane-1,2-diol	-	-	-	-
glycerol	No data available	-	No data available	-
sodium lactate	-	-	-	-
chlorhexidine digluconate	-	-	-	-

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
propane-1,2-diol	-	-	10	168
glycerol	-	-	56	56
sodium lactate	-	-	-	-
chlorhexidine digluconate	-	-	-	-

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
propane-1,2-diol	-	-	10	50
glycerol	-	-	-	33
sodium lactate	-	-	-	-
chlorhexidine digluconate	-	-	-	-

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)
propane-1,2-diol	260	26	183	20000
glycerol	0.885	0.0885	8.85	1000
sodium lactate	1.6	-	-	11
chlorhexidine digluconate	-	-	-	-

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
propane-1,2-diol	572	57.2	50	-
glycerol	3.3	0.33	0.141	-
sodium lactate	-	-	-	-
chlorhexidine digluconate	-	-	-	-

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: No special requirements under normal use conditions.

REACH use scenarios considered for the undiluted product:

	SWED - Sector-specific worker exposure description	LCS	PROC	Duration (min)	ERC
Manual application by dipping, soaking, pouring	AISE_SWED_PW_13_2	PW	PROC 13	60	ERC8a
Manual application	AISE_SWED_PW_19_1	PW	PROC 19	480	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: 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: Should not reach sewage water or drainage ditch undiluted or unneutralised.

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: Clear , Dark , Purple
Odour: Product specific
Odour threshold: Not applicable
Melting point/freezing point (°C): Not determined — Not relevant to classification of this product
Initial boiling point and boiling range (°C): Not determined — See substance data

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
propane-1,2-diol	185-190	Method not given	1013
glycerol	290	Method not given	1013
sodium lactate	No data available		
chlorhexidine digluconate	Product decomposes before boiling	OECD 103 (EU A.2)	

Method / remark

Flammability (solid, gas): Not applicable to liquids

Flammability (liquid): Not flammable.
Flash point (°C): > 100 °C — closed cup
Sustained combustion: Not applicable.
(UN Manual of Tests and Criteria, section 32, L.2)
Lower and upper explosion limit/flammability limit (%): Not determined — See substance data

Substance data, flammability or explosive limits, if available:

Ingredient(s)	Lower limit (% vol)	Upper limit (% vol)
propane-1,2-diol	2.6	12.6
glycerol	2.7	19
chlorhexidine digluconate	-	-

Method / remark

Autoignition temperature: Not determined
Decomposition temperature: Not applicable.
pH: ≈ 5 (neat) — ISO 4316
Kinematic viscosity: ≈ 475 mPa.s (20 °C) — DM-006 Viscosity - Standard
Solubility in / Miscibility with water: Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
propane-1,2-diol	Soluble	Method not given	
glycerol	500	Method not given	20
sodium lactate	771	OECD 105 (EU A.6)	19
chlorhexidine digluconate	Soluble	OECD 105 (EU A.6)	25

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)
propane-1,2-diol	18.6	Method not given	20
glycerol	< 1	Method not given	20
sodium lactate	< 75	OECD 104 (EU A.4)	20
chlorhexidine digluconate	0.0051	OECD 104 (EU A.4)	25

Method / remark

Relative density: ≈ 1.01 (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 — Weight of evidence

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

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)
propane-1,2-diol	LD_{50}	> 10000	Rat	Method not given		Not established
glycerol	LD_{50}	12600	Mouse	Method not given		Not established
sodium lactate	LD_{50}	> 2000	Rat	EPA OPP 81-1		Not established
chlorhexidine digluconate	LD_{50}	> 2000	Rat	OECD 401 (EU B.1)		Not established

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE Dermal (mg/kg)
propane-1,2-diol	LD_{50}	> 2000	Rabbit	Method not given		Not established
glycerol	LD_{50}	> 10000	Rabbit	Method not given		Not established
sodium lactate	LD_{50}	> 2000	Rabbit	EPA OPP 81-2		Not established
chlorhexidine digluconate	LD_{50}	> 5000	Rabbit	EPA OPP 81-2		Not established

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
propane-1,2-diol	LC_{50}	> 317 (mist) No mortality observed	Rabbit	Non guideline test	
glycerol		> 2.75	Rat	Weight of evidence	4 Hrs.
sodium lactate	LC_{50}	> 7.94	Rabbit	OECD 403 (EU B.2)	4
chlorhexidine digluconate		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)
propane-1,2-diol	Not established	Not established	Not established	Not established
glycerol	Not established	Not established	Not established	Not established
sodium lactate	Not established	Not established	Not established	Not established
chlorhexidine digluconate	Not established	Not established	Not established	Not established

Irritation and corrosivity
Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
propane-1,2-diol	Not irritant	Rabbit	OECD 404 (EU B.4)	
glycerol	Not irritant		OECD 404 (EU B.4)	
sodium lactate	Not irritant			
chlorhexidine digluconate	Not irritant	Rabbit	OECD 404 (EU B.4)	4 hour(s)

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
propane-1,2-diol	Not corrosive or irritant	Rabbit	OECD 405 (EU B.5)	
glycerol	Not corrosive or irritant		Method not given	
sodium lactate	Irritant			
chlorhexidine digluconate	Severe damage	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
propane-1,2-diol	No data available			
glycerol	No data available			
sodium lactate	No data available			
chlorhexidine digluconate	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
propane-1,2-diol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
glycerol	Not sensitising	Human	Human repeated patch test	
sodium lactate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	
chlorhexidine digluconate	Not sensitising	Guinea pig	Method not given	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
propane-1,2-diol	No data available			
glycerol	No data available			
sodium lactate	No data available			
chlorhexidine digluconate	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)
propane-1,2-diol	No evidence for mutagenicity, negative test results	Method not given	No data available	
glycerol	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	
sodium lactate	No data available		No data available	
chlorhexidine digluconate	No evidence of genotoxicity, negative test results	OECD 471 (EU B.12/13) OECD 476 (HGPRT) OECD 473	No evidence of genotoxicity, negative test results No evidence for mutagenicity	OECD 474 (EU B.12)

Carcinogenicity

Ingredient(s)	Effect
propane-1,2-diol	No evidence for carcinogenicity, negative test results
glycerol	No evidence for carcinogenicity, negative test results
sodium lactate	No data available
chlorhexidine digluconate	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
propane-1,2-diol			No data available				No evidence for reproductive toxicity
glycerol			No data available				Not toxic for reproduction
sodium lactate			No data available				
chlorhexidine digluconate			-	Rat	Weight of evidence OECD 414 (EU B.31), oral		No evidence for reproductive toxicity No evidence for developmental 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)	Specific effects and organs affected
propane-1,2-diol		No data available				
glycerol		No data available				
sodium lactate		No data available				
chlorhexidine digluconate		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
propane-1,2-diol		No data available				
glycerol		No data available				
sodium lactate		No data available				
chlorhexidine digluconate		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
propane-1,2-diol		No data available				
glycerol		No data available				
sodium lactate		No data available				
chlorhexidine digluconate		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
propane-1,2-diol			No data available					
glycerol			No data available					
sodium lactate			No data available					
chlorhexidine digluconate			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
propane-1,2-diol	No data available
glycerol	No data available
sodium lactate	No data available
chlorhexidine digluconate	Not applicable

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
propane-1,2-diol	No data available
glycerol	No data available
sodium lactate	No data available
chlorhexidine digluconate	Not applicable

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)
propane-1,2-diol	LC_{50}	> 1000	*Fish*	Method not given	24
glycerol	LC_{50}	54000	*Oncorhynchus mykiss*	Method not given	96
sodium lactate	LC_{50}	162	*Oncorhynchus mykiss*	Read across	96
chlorhexidine digluconate	LC_{50}	2.08	*Brachydanio rerio*	OECD 203 (EU C.1)	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
propane-1,2-diol	EC_{50}	> 100	*Daphnia*	Method not given	48
glycerol	EC_{50}	> 10000	*Daphnia magna Straus*	Method not given	24
sodium lactate	EC_{50}	162	*Daphnia magna Straus*	Read across	48
chlorhexidine digluconate	EC_{50}	0.087 (measured)	*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)
propane-1,2-diol	EC_{50}	24200	*Desmodesmus subspicatus*	OECD 201 (EU C.3)	72
glycerol		2900			
sodium lactate	EC_{50}	3480800	*Pseudokirchneriella subcapitata*	Read across	72
chlorhexidine digluconate	E_rC_{50}	0.081 (measured)	*Desmodesmus subspicatus*	OECD 201 (EU C.3)	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
propane-1,2-diol		No data available			
glycerol		No data available			
sodium lactate		No data available			
chlorhexidine digluconate		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
propane-1,2-diol	EC_{0}	> 20000	*Pseudomonas putida*	Method not given	18 hour(s)
glycerol	EC_{50}	> 10000	*Pseudomonas putida*	Method not given	16 hour(s)
sodium lactate		No data available			
chlorhexidine digluconate	EC_{50}	25	*Activated sludge*	OECD 209	3 hour(s)

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
propane-1,2-diol		No data available				
glycerol		No data available				
sodium lactate		No data available				
chlorhexidine digluconate		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed

		(mg/l)			time	
propane-1,2-diol	NOEC	13020	*Ceriodaphnia dubia*	Method not given	7 day(s)	
glycerol		No data available				
sodium lactate		No data available				
chlorhexidine digluconate	NOEC	0.0206 (measured)	*Daphnia magna*	OECD 211	21 day(s)	

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
propane-1,2-diol		No data available				
glycerol		No data available				
sodium lactate		No data available				
chlorhexidine digluconate	NOEC	21	*Chironomus riparius*	OECD 218		

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
chlorhexidine digluconate	NOEC	> 1000	*Eisenia fetida*	OECD 207	14	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
chlorhexidine digluconate	EC_{50}	526	*Brassica napus*	OECD 208	21	

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:

Ingredient(s)	Half-life time	Method	Evaluation	Remark
chlorhexidine digluconate	No data available	QSAR Read across	Rapidly photodegradable	Estimate

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
chlorhexidine digluconate	> 365 day(s)	OECD 111		

Abiotic degradation - other processes, if available:

Ingredient(s)	Type	Half-life time	Method	Evaluation	Remark
chlorhexidine digluconate	Photolysis	8.6- 69.1 day(s)	Method not given	Degradable by photolysis in water	

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT_{50}	Method	Evaluation
propane-1,2-diol			> 70 % in 28 day(s)	OECD 301A	Readily biodegradable
glycerol			60% in 28 day(s)	Method not given	Readily biodegradable
sodium lactate	Activated sludge, aerobe	Oxygen depletion		Method not given	Readily biodegradable, without 10 day window
chlorhexidine digluconate				Weight of evidence	Not readily biodegradable.

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
propane-1,2-diol	-1.07	Method not given	No bioaccumulation expected	
glycerol	-1.76	Method not given	No bioaccumulation expected	
sodium lactate	No data available			
chlorhexidine digluconate	-1.81	OECD 107		

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
propane-1,2-diol	No data available				
glycerol	No data available				
sodium lactate	No data available				
chlorhexidine digluconate	42		Weight of evidence	Low potential for bioaccumulation	

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
propane-1,2-diol	No data available				Potential for mobility in soil, soluble in water
glycerol	No data available				Potential for mobility in soil, soluble in water
sodium lactate	No data available				
chlorhexidine digluconate	> 3.9		OECD 121		

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.

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: 3082

14.2 UN proper shipping name:

Environmentally hazardous substance, liquid, n.o.s. (chlorhexidine digluconate)

14.3 Transport hazard class(es):

Transport hazard class (and subsidiary risks): 9

14.4 Packing group: III

14.5 Environmental hazards:

Environmentally hazardous: Yes
Marine pollutant: Yes
14.6 Special precautions for user: None known.
14.7 Maritime transport in bulk according to IMO instruments: The product is not transported in bulk tankers.

Other relevant information:
ADR
Classification code: M6
Tunnel restriction code: (-)
Hazard identification number: 90
IMO/IMDG
EmS: F-A, S-F

The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code
Transport regulations include special provisions for dangerous goods packed in small quantities classified under UN3077 or UN3082

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)
• 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.

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: MS1001768 **Version:** 01.2 **Revision:** 2024-08-05

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):, 3, 6, 7, 8, 9, 11, 12

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
• H318 - Causes serious eye damage.

- H319 - Causes serious eye irritation.
- H400 - Very toxic to aquatic life.
- H410 - Very toxic to aquatic life with long lasting effects.

End of Safety Data Sheet