Safety Data Sheet

According to Regulation (EC) No 1907/2006

FL 501 01X

Revision: 2019-08-25 **Version:** 01.00

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

1.1 Product identifier
Trade name: FL 501 01X

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses:
For industrial use only.
AISE-P801 - Food process cleaner. Cleaning In place (CIP) process
Disinfectant for closed processing systems (AISE_CS_I02 & AISE_CS_I04)
Descaling product
Uses advised against: Uses other than those identified are not recommended

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
Skin Corr. 1B (H314)
Eye Dam. 1 (H318)
Met. Corr. 1 (H290)

2.2 Label elements

Signal word: Danger.

Contains methanesulphonic acid (Methanesulphonic Acid), glycolic acid (Glycolic Acid).

Hazard statements:
H314 - Causes severe skin burns and eye damage.
H290 - May be corrosive to metals.

Precautionary statements:
P260 - Do not breathe vapours.
P280 - Wear protective gloves, protective clothing and eye or face protection.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
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.

2.3 Other hazards
No other hazards known. The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
methanesulphonic acid	200-898-6	75-75-2	01-2119491166-34	Skin Corr. 1B (H314) Acute Tox. 4 (H302) Acute Tox. 4 (H312) STOT SE 3 (H335) Met. Corr. 1 (H290)		3-10
sodium cumenesulphonate	239-854-6	-	01-2119489411-37	Eye Irrit. 2 (H319)		3-10
glycolic acid	201-180-5	79-14-1	[6]	Skin Corr. 1B (H314) Acute Tox. 4 (H332)		3-10
octenylsuccinic acid	249-244-1	[1]	[1]	Skin Corr. 1B (H314) Acute Tox. 4 (H302) Acute Tox. 4 (H312)		1-3
octanoic acid	204-677-5	124-07-2	[6]	Skin Corr. 1C (H314) Aquatic Chronic 3 (H412)		0.1-1

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

SECTION 4: First aid measures

4.1 Description of first aid measures

General Information: If unconscious place in recovery position and seek medical advice. Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator.

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

Skin contact: Wash skin with plenty of lukewarm, gently flowing water for at least 30 minutes. Take off immediately all contaminated clothing and wash it before reuse. Immediately call a POISON CENTRE, doctor or physician.

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. Do NOT induce vomiting. Keep at rest. Immediately call a POISON CENTRE, doctor or physician.

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

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: No known effects or symptoms in normal use.

Skin contact: Causes severe burns.

Eye contact: Causes severe or permanent damage.

Ingestion: Ingestion will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach.

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

Ensure adequate ventilation. Do not breathe dust or vapour. Wear suitable protective clothing, gloves and eye/face protection.

6.2 Environmental precautions

Do not allow to enter drainage system, surface or ground water. Dilute with plenty of water.

6.3 Methods and material for containment and cleaning up
Use neutralising agent. Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust). Ensure adequate ventilation.

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 face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. Do not breathe vapours. 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:

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 oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
methanesulphonic acid	-	-	-	8.33
sodium cumenesulphonate	No data available	No data available	No data available	3.8
glycolic acid	-	-	-	0.75
octenylsuccinic acid	-	-	-	-
octanoic acid	-	-	-	2.5

DNEL 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)
methanesulphonic acid	No data available	-	No data available	19.44
sodium cumenesulphonate	No data available	No data available	No data available	7.6
glycolic acid	-	-	-	57.69
octenylsuccinic acid	-	1	-	10
octanoic acid	No data available	-	No data available	10

DNEL 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)
methanesulphonic acid	No data available	-	No data available	8.33
sodium cumenesulphonate	No data available	No data available	No data available	3.8
glycolic acid	-	-	-	28.85
octenylsuccinic acid	-	No data available	No data available	No data available
octanoic acid	No data available	-	No data available	5

DNEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
methanesulphonic acid	-	-	2.89	6.76
sodium cumenesulphonate	No data available	No data available	No data available	53.6
glycolic acid	9.2	9.2	1.53	10.56
octenylsuccinic acid	-	-	-	-
octanoic acid	-	-	-	17.632

DNEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
methanesulphonic acid	-	1.44	1.73	1.44
sodium cumenesulphonate	No data available	No data available	No data available	13.2
glycolic acid	-	2.3	2.3	2.6
octenylsuccinic acid	-	-	-	-
octanoic acid	-	-	-	4.348

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)
methanesulphonic acid	0.012	0.0012	0.12	100
sodium cumenesulphonate	0.23	0.023	2.3	100
glycolic acid	0.0312	0.0031	0.312	7
octenylsuccinic acid	0.02	0.002	0.2	10
octanoic acid	0.007	0.0007	0.22	912

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
methanesulphonic acid	0.0251	-	0.00183	0.12
sodium cumenesulphonate	0.862	0.086	0.037	No data available
glycolic acid	0.115	0.0115	0.007	-
octenylsuccinic acid	1.7	0.17	0.2	No data available
octanoic acid	0.0739	0.00739	0.0107	-

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:
Covering activities such as filling and transfer of product to application equipment, flasks or buckets

Appropriate engineering controls: If the product is diluted by using specific dosing systems with no risk of splashes or direct skin contact, the personal protection equipment as described in this section is not required.

Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

Personal protective equipment

Eye / face protection: Safety glasses or goggles (EN 166). The use of a full-face shield or other full-face protection is strongly recommended when handling open containers or if splashes may occur.

Hand protection: Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.
Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material thickness: ≥ 0.7 mm
Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: ≥ 30 min Material thickness: ≥ 0.4 mm
In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.

Body protection: Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur (EN 14605).

Respiratory protection: Respiratory protection is not normally required. However, inhalation of vapour, spray, gas or aerosols should be avoided.

Environmental exposure controls: Should not reach sewage water or drainage ditch undiluted or unneutralised.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (%): 1

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

Personal protective equipment
Eye / face protection: No special requirements under normal use conditions.
Hand protection: No special requirements under normal use conditions.
Body protection: No special requirements under normal use conditions.
Respiratory protection: No special requirements under normal use conditions.

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
Information in this section refers to the product, unless it is specifically stated that substance data is listed

	Method / remark
Physical State: Liquid	
Colour: Clear, Pale Yellow	
Odour: To Match Standard (TMS)	
Odour threshold: Not applicable	
pH < 2 (neat)	ISO 4316
Dilution pH: > 2 (1%)	ISO 4316
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)
methanesulphonic acid	167	Method not given	
sodium cumenesulphonate	> 100	Method not given	
glycolic acid	112	Method not given	1013
octenylsuccinic acid	No data available		
octanoic acid	237	Method not given	

	Method / remark
Flammability (liquid): Not flammable.	
Flash point (°C): > 93.4 °C	Weight of evidence
Sustained combustion: Not applicable. *(UN Manual of Tests and Criteria, section 32, L.2)*	
Evaporation rate: Not determined	Not relevant to classification of this product
Flammability (solid, gas): Not applicable to liquids	
Upper/lower flammability limit (%): Not determined	

Substance data, flammability or explosive limits, if available:

	Method / remark
Vapour pressure: Not determined	See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
methanesulphonic acid	0.0475	Method not given	20
sodium cumenesulphonate	No data available		
glycolic acid	0.41	Method not given	25
octenylsuccinic acid	No data available		
octanoic acid	5.33	Method not given	20

	Method / remark
Vapour density: Not determined	Not relevant to classification of this product
Relative density: ≈ 1.07 (20 °C)	OECD 109 (EU A.3)
Solubility in / Miscibility with Water: Fully miscible	

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
methanesulphonic acid	Soluble		
sodium cumenesulphonate	Soluble		
glycolic acid	> 300	Method not given	22
octenylsuccinic acid	No data available		
octanoic acid	0.0618-0.68	Method not given	20

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

	Method / remark
Autoignition temperature: Not determined	
Decomposition temperature: Not applicable.	
Viscosity: ≈ 5 mPa.s (20 °C)	DM-006 Viscosity - Additional
Explosive properties: Not explosive.	
Oxidising properties: Not oxidising.	

9.2 Other information

Surface tension (N/m): Not determined	Not relevant to classification of this product
Corrosion to metals: Corrosive	Weight of evidence

Substance data, dissociation constant, if 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
Reacts with alkali and metals. Keep away from products containing chlorine-based bleaching agents or sulphites.

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, vapours (mg/l): 310

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)
methanesulphonic acid	LD_{50}	649	Rat	OECD 401 (EU B.1)	
sodium cumenesulphonate	LD_{50}	> 7000	Rat	Method not given	
glycolic acid	LD_{50}	2040	Rat	EPA OPP 81-1	
octenylsuccinic acid		No data available			
octanoic acid	LD_{50}	> 2000	Rat	Method not given	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
methanesulphonic acid	LD_{50}	> 1000	Rabbit	OECD 402 (EU B.3)	
sodium cumenesulphonate	LD_{50}	> 2000	Rabbit	Method not given	
glycolic acid		No data available			
octenylsuccinic acid		No data available			
octanoic acid	LD_{50}	> 2000	Rabbit	Method not given	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
methanesulphonic acid	LC_{0}	> 0.0188	Mouse	Method not given	1

		(vapour) No mortality observed			
sodium cumenesulphonate	LC_{50}	> 770	Rat	Method not given	4
glycolic acid	LC_{50}	3.6 (mist)	Rat	OECD 403 (EU B.2)	4
octenylsuccinic acid		No data available			
octanoic acid	LC_{0}	> 0.1621 (vapour)	Rat	Non guideline test	4

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
methanesulphonic acid	Corrosive	Mouse		1 hour(s)
sodium cumenesulphonate	Mild irritant	Rabbit	OECD 404 (EU B.4)	
glycolic acid	Corrosive	Rabbit	OECD 404 (EU B.4)	
octenylsuccinic acid	No data available			
octanoic acid	Corrosive		OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
methanesulphonic acid	Severe damage	Rabbit	OECD 405 (EU B.5)	
sodium cumenesulphonate	Irritant	Rabbit	OECD 405 (EU B.5)	
glycolic acid	Severe damage	Rabbit	OECD 405 (EU B.5)	
octenylsuccinic acid	No data available			
octanoic acid	Corrosive		Method not given	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
methanesulphonic acid	No data available			
sodium cumenesulphonate	No data available			
glycolic acid	No data available			
octenylsuccinic acid	No data available			
octanoic acid	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
methanesulphonic acid	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	
sodium cumenesulphonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
glycolic acid	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
octenylsuccinic acid	No data available			
octanoic acid	Not sensitising			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
methanesulphonic acid	No data available			
sodium cumenesulphonate	No data available			
glycolic acid	No data available			
octenylsuccinic acid	No data available			
octanoic acid	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)
methanesulphonic acid	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)
sodium cumenesulphonate	No evidence for mutagenicity, negative test results	Method not given	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)
glycolic acid	No evidence of genotoxicity, negative test results	OECD 471 (EU B.12/13) OECD 473 OECD 476	No evidence for mutagenicity No evidence of genotoxicity, negative test results	OECD 474 (EU B.12)
octenylsuccinic acid	No data available		No data available	
octanoic acid	No evidence for mutagenicity, negative test results	OECD 476	No data available	

Carcinogenicity

Ingredient(s)	Effect

methanesulphonic acid	No data available
sodium cumenesulphonate	No evidence for carcinogenicity, negative test results
glycolic acid	No evidence for carcinogenicity, weight-of-evidence
octenylsuccinic acid	No data available
octanoic acid	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
methanesulphonic acid	NOAEL	Impaired fertility Developmental toxicity	≥ 400	Rat	OECD 414 (EU B.31), oral OECD 421, oral		No evidence for reproductive toxicity
sodium cumenesulphonate	NOAEL	Teratogenic effects	> 3000	Rat	Non guideline test		
glycolic acid			No data available				No evidence for reproductive toxicity
octenylsuccinic acid			No data available				
octanoic acid			No data available				No evidence for reproductive toxicity

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
methanesulphonic acid		No data available				
sodium cumenesulphonate	NOAEL	763 - 3534		OECD 408 (EU B.26)	90	
glycolic acid	NOAEL LOAEL	150 300	Rat	OECD 408 (EU B.26)	90	No adverse effects observed
octenylsuccinic acid		No data available				
octanoic acid	NOAEL	1000	Rat	Method not given		

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
methanesulphonic acid		No data available				
sodium cumenesulphonate	NOAEL	440	Mouse	Method not given	90	
glycolic acid		No data available				
octenylsuccinic acid		No data available				
octanoic acid		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
methanesulphonic acid	NOAEL	0.026	Rat	Method not given	30	
sodium cumenesulphonate		No data available				
glycolic acid		No data available				
octenylsuccinic acid		No data available				
octanoic acid		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
methanesulphonic acid			No data available					
sodium cumenesulphonate	Dermal	NOAEL	727	Mouse	Method not given	24 month(s)		
glycolic acid			No data available					
octenylsuccinic acid			No data available					
octanoic acid			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
methanesulphonic acid	Respiratory tract
sodium cumenesulphonate	No data available
glycolic acid	No data available
octenylsuccinic acid	No data available
octanoic acid	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
methanesulphonic acid	Respiratory tract
sodium cumenesulphonate	No data available
glycolic acid	No data available
octenylsuccinic acid	No data available
octanoic acid	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)
methanesulphonic acid	LC_{50}	73	*Oncorhynchus mykiss*	OECD 203 (EU C.1)	96
sodium cumenesulphonate	LC_{50}	> 1000	*Fish*	EPA-OPPTS 850.1075	96
glycolic acid	LC_{50}	114.8	*Pimephales promelas*	Method not given	96
octenylsuccinic acid	LC_{50}	> 100	*Oncorhynchus mykiss*	Method not given Read across	96
octanoic acid	LC_{50}	110	*Brachydanio rerio*	Method not given	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
methanesulphonic acid	EC_{50}	10 - 100	*Daphnia magna Straus*	OECD 202, static	48
sodium cumenesulphonate	EC_{50}	> 1000	*Daphnia*	EPA-OPPTS 850.1010	48
glycolic acid	EC_{50}	99.6	*Daphnia magna Straus*	OECD 202 (EU C.2)	48
octenylsuccinic acid	LC_{50}	> 100	*Daphnia*	Method not given Read across	24
octanoic acid	LC_{50}	170	*Daphnia magna Straus*	Method not given	24

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
methanesulphonic acid	EC_{50}	12 - 24	*Pseudokirchneriella subcapitata*	OECD 201 (EU C.3)	72
sodium cumenesulphonate	E_rC_{50}	310	*Not specified*		72
glycolic acid	NOEC	14.4	*Pseudokirchneriella subcapitata*	OECD 201 (EU C.3)	72
octenylsuccinic acid	EC_{50}	110	*Selenastrum capricornutum*	Method not given Read across	96
octanoic acid	EC_{50}	31	*Pseudokirchneriella subcapitata*	Method not given	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)

methanesulphonic acid		No data available			-
sodium cumenesulphonate		No data available			-
glycolic acid		No data available			-
octenylsuccinic acid		No data available			
octanoic acid		No data available			-

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
methanesulphonic acid	EC_{20}	> 1000	*Activated sludge*	DIN EN ISO 8192-OECD 209-88/302/EEC	0.5 hour(s)
sodium cumenesulphonate	$E_r C_{50}$	> 1000	*Bacteria*	OECD 209	3 hour(s)
glycolic acid		No data available			
octenylsuccinic acid		No data available			
octanoic acid		No data available			

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
methanesulphonic acid		No data available				
sodium cumenesulphonate		No data available				
glycolic acid		No data available				
octenylsuccinic acid		No data available				
octanoic acid		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
methanesulphonic acid		No data available				
sodium cumenesulphonate		No data available				
glycolic acid		No data available				
octenylsuccinic acid		No data available				
octanoic acid	EC_{50}	0.51	*Daphnia magna*	Method not given	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
methanesulphonic acid		No data available			-	
sodium cumenesulphonate		No data available			-	
glycolic acid		No data available			-	
octenylsuccinic acid		No data available				
octanoic acid		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
methanesulphonic acid		No data available			-	
sodium cumenesulphonate		No data available			-	
glycolic acid		No data available			-	
octanoic acid		No data			-	

		available				

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
methanesulphonic acid		No data available			-	
sodium cumenesulphonate		No data available			-	
glycolic acid		No data available			-	
octanoic acid		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
methanesulphonic acid		No data available			-	
sodium cumenesulphonate		No data available			-	
glycolic acid		No data available			-	
octanoic acid		No data available			-	

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
methanesulphonic acid		No data available			-	
sodium cumenesulphonate		No data available			-	
glycolic acid		No data available			-	
octanoic acid		No data available			-	

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
methanesulphonic acid		No data available			-	
sodium cumenesulphonate		No data available			-	
glycolic acid		No data available			-	
octanoic acid		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
methanesulphonic acid		COD removal	>70 % in 28 day(s)	OECD 301A	Readily biodegradable
sodium cumenesulphonate	Activated sludge, aerobe	CO_2 production	100 % in 28 day(s)	OECD 301B	Readily biodegradable
glycolic acid	Activated sludge, aerobe	CO_2 production		OECD 301B	Readily biodegradable
octenylsuccinic acid	Activated sludge, aerobe			OECD 301D Read across	Readily biodegradable
octanoic acid				OECD 301D	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
methanesulphonic acid	-5.17		No bioaccumulation expected	
sodium cumenesulphonate	-1.1	Method not given	Low potential for bioaccumulation	
glycolic acid	-1.07	Method not given	No bioaccumulation expected	
octenylsuccinic acid	4.68	Read across		
octanoic acid	3.05	Method not given		

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
methanesulphonic acid	No data available				
sodium cumenesulphonate	No data available				
glycolic acid	No data available				
octenylsuccinic acid	No data available				
octanoic acid	No data available				

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
methanesulphonic acid	0		Model calculation		Mobile in soil
sodium cumenesulphonate	No data available				
glycolic acid	No data available				
octenylsuccinic acid	No data available				
octanoic acid	69.63				

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 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

European Waste Catalogue: 20 01 14* - acids.

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: 3265

14.2 UN proper shipping name:

Corrosive liquid, acidic, organic, n.o.s. (methanesulphonic acid)

14.3 Transport hazard class(es):

Transport hazard class (and subsidiary risks): 8

14.4 Packing group: II

14.5 Environmental hazards:

Environmentally hazardous: No

Marine pollutant: No

14.6 Special precautions for user: None known.

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

Other relevant information:

ADR

Classification code: C3

Tunnel restriction code: E

Hazard identification number: 80

IMO/IMDG

EmS: F-A, S-B

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 certain classes of dangerous goods packed in limited quantities.

SECTION 15: Regulatory information

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

EU regulations:
- Regulation (EC) No. 1907/2006 - REACH
- Regulation (EC) No 1272/2008 - CLP
- Regulation (EC) No. 648/2004 - Detergents regulation
- Regulation (EU) No 528/2012 on biocidal products

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.

UFI: V79A-K0U0-C00V-3N1N

Ingredients according to EC Detergents Regulation 648/2004

anionic surfactants < 5 %

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

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

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Reason for revision:

This data sheet contains changes from the previous version in section(s):, 2

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:
- H290 - May be corrosive to metals.
- H302 - Harmful if swallowed.
- H312 - Harmful in contact with skin.
- H314 - Causes severe skin burns and eye damage.
- H319 - Causes serious eye irritation.
- H332 - Harmful if inhaled.
- H335 - May cause respiratory irritation.
- H402 - Harmful to aquatic life.
- H412 - Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms:
- AISE - The international Association for Soaps, Detergents and Maintenance Products
- DNEL - Derived No Effect Limit
- EUH - CLP Specific hazard statement
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative
- 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
- OECD - Organization for Economic Cooperation and Development

End of Safety Data Sheet