



Revision: 2020-02-02 Version: 03.2

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

1.1 Product identifier

Trade name: Domestos Professional Toilet Cleaner & Descaler Domestos is a registered trade mark and is used under licence of Unilever

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

Identified uses:

AISE-P307 - Descaling agent. Manual process AISE-P305 - Sanitary cleaner. Manual process AISE-C14 - Descalers for consumer use

AISE-C8 [2] - Toilet cleaners (powder, liquid, gel, tablet) for consumer use 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 Hygiene Sales Limited Jamestown Road, Finglas, Dublin 11, Ireland Tel: 01 8081808 (9am - 5pm Mon-Fri) Email: dublin.orders@diversey.com

1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible) National Poisons Information Centre Tel: 01 809 2166. (8.00 a.m. to 10.00 p.m. 7 days a week) Tel: 01 809 2566 (health care professionals)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Met. Corr. 1 (H290)

2.2 Label elements



Signal word: Warning.

Hazard statements:

H315 + H319 - Causes skin and serious eye irritation.

H290 - May be corrosive to metals.

Precautionary statements:

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
sulphamic acid	226-218-8	5329-14-6	01-2119488633-28, 01-2119846728-23, 01-2119982121-44	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Aquatic Chronic 3 (H412)		3-10
alkylbenzenesulphonic acid	287-494-3	85536-14-7	01-2111-9490234-40	Skin Corr. 1C (H314) Eye Dam. 1 (H318) Acute Tox. 4 (H302) Aquatic Chronic 3 (H412)		3-10
citric acid	201-069-1	77-92-9	01-2119457026-42	Eye Irrit. 2 (H319)		3-10

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

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: Take off immediately all contaminated clothing and wash it before reuse.

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. If eye irritation persists: Get medical

advice or 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: Causes irritation.

Eye contact: Causes severe irritation.

Ingestion: No known effects or symptoms in normal use.

4.3 Indication of any immediate medical attention and special treatment needed

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

SECTION 5: Firefighting measures

5.1 Extinguishing media

Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture

No special hazards known.

5.3 Advice for firefighters

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

No special measures required.

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

Dyke to collect large liquid spills. Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust). Do not place spilled materials back into the original container. Collect in closed and suitable containers for disposal.

6.4 Reference to other sections

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Measures to prevent fire and explosions:

No special precautions required.

Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

Advices on general occupational hygiene:

Follow general hygiene considerations recognised as common good workplace practices. Keep away from food, drink and animal feeding stuffs. Keep out of reach of children. Do not mix with other products unless adviced by Diversey. Wash face, hands and any exposed skin thoroughly after handling. Take off contaminated clothing. Wash contaminated clothing before reuse. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging. Keep out of reach of children.

For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

7.3 Specific end use(s)

No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters Workplace exposure limits

Air limit values, if available:

Biological limit values, if available:

Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

DNEL/DMEL and PNEC values

Human exposure

DNEL oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
sulphamic acid	-	-	-	1.06
alkylbenzenesulphonic acid	-	-	-	0.85
citric acid	-	-	-	-

DNFL	aermai	exposure -	vvorker

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
sulphamic acid	No data available	-	No data available	-
alkylbenzenesulphonic acid	-	-	-	170
citric acid	No data available	-	No data available	-

DNEL dermal exposure - Consumer

Ingredient(s)	Short term - Local	Short term - Systemic	Long term - Local	Long term - Systemic
	effects	effects (mg/kg bw)	effects	effects (mg/kg bw)
sulphamic acid	No data available	-	No data available	-
alkylbenzenesulphonic acid	•	-	-	85
citric acid	No data available	-	No data available	-

DNEL inhalatory exposure - Worker (mg/m³)

BitEE illidiatory expectate trenter (ilig/ill)				
Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
	000.0	00010	0.10010	000.0
sulphamic acid	-	-	=	7.5
alkylbenzenesulphonic acid	-	-	12	12
citric acid	-	-	-	-

DNEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
sulphamic acid	-	-	-	1.85
alkylbenzenesulphonic acid	-	-	3	3
citric acid	-	-	-	-

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)
sulphamic acid	0.3	0.03	0.3	200
alkylbenzenesulphonic acid	0.278	0.0287	0.0167	3.43
citric acid	0.44	0.044	-	> 1000

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
sulphamic acid	0.3	0.03	3	-
alkylbenzenesulphonic acid	0.287	0.287	35	-
citric acid	34.6	3.46	33.1	-

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 undiluted product:

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

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

Personal protective equipment

Eye / face protection: Safety glasses are not normally required. However, their use is recommended in those cases

where splashes may occur when handling the product (EN 166).

Hand protection: Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and

breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such

as risk of splashes, cuts, contact time and temperature.

Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material

thickness: ≥ 0.7 mm

Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: ≥ 30 min

Material thickness: ≥ 0.4 mm

In consultation with the supplier of protective gloves a different type providing similar protection may

be chosen.

Body protection:No special requirements under normal use conditions. **Respiratory protection:**No special requirements under normal use conditions.

Environmental exposure controls: 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, Blue
Odour: Slightly perfumed
Odour threshold: Not applicable

pH < 2 (neat) ISO 4316

Dilution pH: 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)
sulphamic acid	205	Method not given	1013
alkylbenzenesulphonic acid	190	Method not given	
citric acid	No data available		

Method / remark

Flammability (liquid): Not flammable.

Flash point (°C): ≈ ? °C

Sustained combustion: Not applicable. (UN Manual of Tests and Criteria, section 32, L.2)

Evaporation rate: Not determined

Flammability (solid, gas): Not applicable to liquids Upper/lower flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available:

Not relevant to classification of this product

Method / remark

Vapour pressure: Not determined See substance data

Substance data, vapour pressure

Vapour density: Not determined Relative density: ≈ 1.06 (20 °C)

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
sulphamic acid	0	Method not given	20
alkylbenzenesulphonic acid	0.15		20
citric acid	No data available		

Method / remark

Not relevant to classification of this product

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)
sulphamic acid	213	Method not given	20
alkylbenzenesulphonic acid	> 10	Method not given	20
citric acid	1630	Method not given	

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

Method / remark

Not relevant to classification of this product

Autoignition temperature: Not determined Decomposition temperature: Not applicable.

Viscosity: ≈ 95 mPa.s (20 °C) Explosive properties: Not explosive. Oxidising properties: Not oxidising.

9.2 Other information

Surface tension (N/m): Not determined

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 Skin irritation and corrosivity

Result: Skin irritant 2

Species: Not applicable Method: Weight of evidence

Eye irritation and corrosivity

Result: Eye irritant 2 Species: Not applicable. Method: Weight of evidence

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

Acute toxicity

Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species Method		Exposure time (h)
sulphamic acid	LD 50	2065	Rat	Method not given	
alkylbenzenesulphonic acid	LD 50	> 1470	Rat	OECD 401 (EU B.1)	
citric acid	LD 50	3000	Rat	Method not given	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
sulphamic acid		No data available			
alkylbenzenesulphonic acid	LD 50	> 2000	Rat	OECD 402 (EU B.3)	
citric acid	LD 50	> 2000	Rat	Method not given	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sulphamic acid		No data available			
alkylbenzenesulphonic acid		No data available			
citric acid		No data available			

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sulphamic acid	Irritant	Rabbit	OECD 404 (EU B.4)	
alkylbenzenesulphonic acid	Corrosive	Rabbit	OECD 404 (EU B.4)	
citric acid	Not irritant	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sulphamic acid	Severe damage	Rabbit	OECD 405 (EU B.5)	
alkylbenzenesulphonic acid	Severe damage	Rabbit	OECD 405 (EU B.5)	
citric acid	Irritant	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sulphamic acid	No data available			
alkylbenzenesulphonic acid	No data available			
citric acid	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sulphamic acid	No data available			
alkylbenzenesulphonic acid	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
citric acid	Not sensitising	Guinea pig	Method not given	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sulphamic acid	No data available			
alkylbenzenesulphonic acid	No data available			
citric 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)
sulphamic acid	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	
alkylbenzenesulphonic acid		OECD 471 (EU B.12/13) OECD 473	3 , , ,	OECD 474 (EU B.12)
citric acid	No data available		No evidence of genotoxicity, negative test results	Method not given

Carcinogenicity

	Ingredient(s) Effect			
ſ	sulphamic acid	No data available		
ſ	alkylbenzenesulphonic acid	No evidence for carcinogenicity, weight-of-evidence		
ſ	citric acid	No evidence for carcinogenicity, negative test results		

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value	Species	Method	Exposure	Remarks and other effects
			(mg/kg bw/d)			time	reported
sulphamic acid			No data				
			available				
alkylbenzenesulphonic	NOAEL	Teratogenic effects	300	Rat	Read across	20 day(s)	
acid		-					
citric acid			No data				No evidence for reproductive
			available				toxicity

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

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Specific effects and organs
		(mg/kg bw/d)			time (days)	affected
sulphamic acid		No data				
		available				
alkylbenzenesulphonic acid		No data				
		available				
citric acid		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
sulphamic acid		No data			(, -)	
·		available				
alkylbenzenesulphonic acid		No data				
		available				
citric acid		No data				
		available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value	Species	Method		Specific effects and organs
		(mg/kg bw/d)			time (days)	affected
sulphamic acid		No data				
		available				
alkylbenzenesulphonic acid		No data				
		available				
citric acid		No data				
		available				

Chronic toxicity

Ingredient(s)	Exposure	Endpoint	Value	Species	Method	Exposure	Specific effects and	Remark
	route		(mg/kg bw/d)			time	organs affected	
sulphamic acid			No data					
			available					
alkylbenzenesulphonic	Oral	NOAEL	85	Rat	Read	9 month(s)		
acid					across			
citric acid			No data					_
			available			1		

STOT-single exposure

Ingredient(s)	Affected organ(s)
sulphamic acid	No data available
alkylbenzenesulphonic acid	No data available
citric acid	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sulphamic acid	No data available
alkylbenzenesulphonic acid	No data available
citric 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)
sulphamic acid	LC 50	70.3	Pimephales promelas	Method not given	96
alkylbenzenesulphonic acid	LC 50	1 - 10	Cyprinus carpio	OECD 203 (EU C.1)	96
citric acid	LC 50	440	Leuciscus idus	Method not given	48

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sulphamic acid		No data available			1
alkylbenzenesulphonic acid	EC 50	1 - 10	Daphnia magna Straus	OECD 202 (EU C.2)	48
citric acid	EC 50	1535	Daphnia magna Straus	Method not given	24

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sulphamic acid		No data available			-
alkylbenzenesulphonic acid	EC 50	10 - 100	Desmodesmus subspicatus	OECD 201 (EU C.3)	72
citric acid	LC 50	425	Scenedesmus	Method not given	168

quatio short term tovicity marine angoing						quauric	auda			
quatic short-term toxicity - marine species Ingredient(s)		Enc	lpoint	Valu (mg/l		Speci	es		Method	Exposure time (days
sulphamic acid				No da availat						-
alkylbenzenesulphonic ac	cid			No da	ta					-
citric acid				availat No da availat	ta					-
pact on sewage plants - toxicity to bacteria				avanai						
Ingredient(s)		Enc	point	Value		Inocul	um		Method	Exposur
sulphamic acid		E	C 10	(mg/l) > 1000		nonas	Met	hod not given	time 16 hour(s	
alkylbenzenesulphonic ac	sid			No da availat		putio	da			
citric acid		E	C 50	> 1000		Pseudor putio		Met	hod not given	16 hour(
quatic long-term toxicity uatic long-term toxicity - fish						-	•			•
Ingredient(s)	Endpoint	Value (mg/l)	Sp	ecies	Me	thod	Expo: tim		Effects ob	served
sulphamic acid		No data available								
alkylbenzenesulphonic acid	NOEC	0.1 - 1		pomis rochirus	Read	across	28 da	ıy(s)		
citric acid		No data available								
uatic long-term toxicity - crustacea										
Ingredient(s)	Endpoint	Value (mg/l)	Sp	ecies	Me	thod	Expo:		Effects ob	served
sulphamic acid		No data available								
alkylbenzenesulphonic acid	NOEC	1 - 10	Not s	specified	Read	across	32 da	y(s)		
citric acid		No data available								
uatic toxicity to other aquatic benthic organisms, ingredient(s)	including sediment Endpoint	-dwelling orgar Value (mg/kg dw sediment)		available: ecies	Me	thod	Expo		Effects ob	served
sulphamic acid		No data available					-	\neg		
alkylbenzenesulphonic acid		No data					-			
citric acid		available No data available					-			
errestrial toxicity										
rrestrial toxicity - soil invertebrates, including eart	hworms, if available Endpoint	e: Value	Sn	ecies	Mc	thod	Expo	sura T	Effects ob	served
ingredient(s)	Lindpoint	(mg/kg dw soil)	J Sp	ccies	IVIC	illou	time (c	lays)	Lifects on	isei veu
sulphamic acid		No data					-			
alkylbenzenesulphonic acid	LD 50	available > 1000	Eiser	nia fetida	OE	CD 207	14			
alkylbenzenesulphonic acid citric acid	LD 50	available	Eiser	nia fetida	OE	CD 207	14	1		
citric acid rrestrial toxicity - plants, if available:		available > 1000 No data available					-	1		
citric acid	LD 50	available > 1000 No data available Value (mg/kg dw		ecies		CD 207		sure	Effects ob	served
citric acid errestrial toxicity - plants, if available:		available > 1000 No data available Value (mg/kg dw soil) No data					Expo	sure lays)	Effects ob	served
citric acid rrestrial toxicity - plants, if available: Ingredient(s)		available > 1000 No data available Value (mg/kg dw soil)			Ме		Expo	sure lays)	Effects ob	served
citric acid errestrial toxicity - plants, if available: Ingredient(s) sulphamic acid	Endpoint	available > 1000 No data available Value (mg/kg dw soil) No data available			Ме	thod	Expo time (c	sure lays)	Effects ob	served
citric acid rrestrial toxicity - plants, if available: Ingredient(s) sulphamic acid alkylbenzenesulphonic acid citric acid	Endpoint	available > 1000 No data available Value (mg/kg dw soil) No data available 167 No data			Ме	thod	Expo time (c	sure lays)	Effects ob	served
citric acid errestrial toxicity - plants, if available: Ingredient(s) sulphamic acid alkylbenzenesulphonic acid citric acid errestrial toxicity - birds, if available: Ingredient(s)	Endpoint	available > 1000 No data available Value (mg/kg dw soil) No data available 167 No data available Value	Spi		Me	thod	Expo time (c	sure lays)	Effects ob	
citric acid errestrial toxicity - plants, if available: Ingredient(s) sulphamic acid alkylbenzenesulphonic acid citric acid errestrial toxicity - birds, if available:	Endpoint EC 50	available > 1000 No data available Value (mg/kg dw soil) No data available 167 No data available	Spi	ecies	Me	cD 208	Exportime (d	sure lays)		
citric acid errestrial toxicity - plants, if available: Ingredient(s) sulphamic acid alkylbenzenesulphonic acid citric acid errestrial toxicity - birds, if available: Ingredient(s)	Endpoint EC 50	available > 1000 No data available Value (mg/kg dw soil) No data available 167 No data available Value No data available No data available	Spi	ecies	Me	cD 208	Exportime (d	sure lays)		
citric acid errestrial toxicity - plants, if available: Ingredient(s) sulphamic acid alkylbenzenesulphonic acid citric acid errestrial toxicity - birds, if available: Ingredient(s) sulphamic acid	Endpoint EC 50	available > 1000 No data available Value (mg/kg dw soil) No data available 167 No data available Value No data available	Spi	ecies	Me	cD 208	Exportime (c	sure lays)		

	(mg/kg dw soil)	tim	ne (days)
sulphamic acid	No data		-
	available		
alkylbenzenesulphonic acid	No data		-
	available		
citric 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
sulphamic acid		No data available			-	
alkylbenzenesulphonic acid		No data available			-	
citric 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
sulphamic acid					Not applicable (inorganic substance)
alkylbenzenesulphonic acid			94 % in 28 day(s)	OECD 301A	Readily biodegradable
citric acid			97 % in 28 day(s)	OECD 301B	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potentialPartition coefficient n-octanol/water (log Kow)

ditation coomolon in cotanol mater (log non)								
Ingredient(s)	Value	Method	Evaluation	Remark				
sulphamic acid	0.1		No bioaccumulation expected					
alkylbenzenesulphonic acid	3.2	Method not given	Low potential for bioaccumulation					
citric acid	-1.72		No bioaccumulation expected					

Bioconcentration factor (BCF)										
Ingredient(s)	Value	Species	Method	Evaluation	Remark					
sulphamic acid	No data available									
alkylbenzenesulphonic acid	2 - 500		Method not given	Low potential for bioaccumulation						
citric acid	No data available									

12.4 Mobility in soil

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
sulphamic acid	No data available				
alkylbenzenesulphonic acid	No data available				Low mobillity in soil
citric acid	No data available				Potential for mobility in soil, soluble in water

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 29* - detergents containing dangerous substances.

Empty packaging

Recommendation: Dispose of observing national or local regulations. **Suitable cleaning agents:** Water, if necessary with cleaning agent.

SECTION 14: Transport information



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

14.1 UN number: 1760

14.2 UN proper shipping name:

Corrosive liquid, n.o.s. (sulphamic acid, alkylsulphonic acid)

14.3 Transport hazard class(es):

Transport hazard class (and subsidiary risks): 8

14.4 Packing group: III
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: C9
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

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

UFI: SFV6-10FX-1006-5245

Ingredients according to EC Detergents Regulation 648/2004

anionic surfactants 5 - 15 % perfumes

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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This data sheet contains changes from the previous version in section(s):, 6, 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:

- H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage.

- H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 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