

Domestos Professional Toilet Limescale Remover

Revision: 2015-04-21

Version: 02.0

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

1.1 Product identifier

Trade name: Domestos Professional Toilet Limescale Remover
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:

For professional use only.

AISE-P307 - Descaling agent. Manual process

AISE-P308 - Descaling agent. Spray and rinse manual process

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

Unilever UK Ltd., Freepost ADM1000, London SW1A 2XX
Tel: 0800 776647

Diversey Ltd

Weston Favell Centre, Northampton NN3 8PD, United Kingdom

Tel: 01604 405311, Fax: 01604 406809

Regulatory Email: MSDSinfoUK@sealedair.com

1.4 Emergency telephone number

For medical or environmental emergency only:
call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified and labelled in accordance with Regulation (EC) No 1272/2008.

Skin Irrit. 2 (H315)

Eye Dam. 1 (H318)

Met. Corr. 1 (H290)

Classification in accordance with Directive 1999/45/EC and corresponding national legislation

Indication of danger

Xi - Irritant

Risk phrases:

R36/38 - Irritating to eyes and skin.

2.2 Label elements



Signal word: Danger.

Contains alkylbenzenesulphonic acid (Dodecylbenzene Sulfonic Acid).

Hazard statements:

H315 - Causes skin irritation.

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H318 - Causes serious eye damage.

H290 - May be corrosive to metals.

Precautionary statements:

P280 - Wear eye or face protection.

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	Classification (1999/45/EC)	Notes	Weight percent
sulphamic acid	226-218-8	5329-14-6	01-2119488633-28	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Aquatic Chronic 3 (H412)	Xi;R36/38 R52/53		3-10
alkylbenzenesulphonic acid	287-494-3	85536-14-7	01-2111-9490234-40	Skin Corr. 1C (H314) Acute Tox. 4 (H302) Aquatic Chronic 3 (H412)	Xn;R22 C;R34		3-10
citric acid	201-069-1	77-92-9	[1]	Eye Irrit. 2 (H319)	Xi;R36		3-10

* Polymer.

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

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.

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. Take off immediately all contaminated clothing and wash it before re-use. If skin irritation occurs: Get medical advice or attention.

Eye contact:

Immediately rinse eyes cautiously with lukewarm water for several 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. 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 or permanent damage.

Ingestion:

No known effects or symptoms in normal use.

4.3 Indication of any immediate medical attention and special treatment needed

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

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**

Wear eye/face protection.

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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

Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust).

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 to prevent aerosol and dust generation:

Avoid formation of aerosol.

Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

Advices on general occupational hygiene:

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless advised by Sealed Air. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Use personal protective equipment as required. Avoid contact with eyes. Use only with adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Keep only in original container. Store in a closed container.

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	-	-	-	-

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)
sulphamic acid	No data available	-	No data available	-
alkylbenzenesulphonic acid	No data available	-	No data available	170
citric acid	No data available	-	No data available	-

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)
sulphamic acid	No data available	-	No data available	-
alkylbenzenesulphonic acid	No data available	-	No data available	85
citric acid	No data available	-	No data available	-

DNEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
sulphamic acid	-	-	-	7.5
alkylbenzenesulphonic acid	-	-	12	12

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citric acid	-	-	-	-
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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/m ³)
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.

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: Use only in well ventilated areas.
Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

Personal protective equipment

Eye / face protection: Safety glasses or goggles (EN 166).
Hand protection: 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: 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.

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)	
Melting point/freezing point (°C): Not determined	
Initial boiling point and boiling range (°C): Not determined	

Substance data, boiling point

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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

Flash point (°C): Not applicable.

Sustained combustion: Not determined

Evaporation rate: Not determined

Flammability (solid, gas): Not determined

Upper/lower flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available:

Method / remark

Vapour pressure: Not determined

Substance data, vapour pressure

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

Vapour density: Not determined

Relative density: 1.06 g/cm³ (20 °C)

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

Autoignition temperature: Not determined

Decomposition temperature: Not determined

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

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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)
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	Severe damage	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	

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alkylbenzenesulphonic acid	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) OECD 473	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)
citric acid	No data available		No evidence of genotoxicity, negative test results	Method not given

Carcinogenicity

Ingredient(s)	Effect
sulphamic acid	No data available
alkylbenzenesulphonic acid	No evidence for carcinogenicity, weight-of-evidence
citric 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
sulphamic acid			No data available				
alkylbenzenesulphonic acid	NOAEL	Teratogenic effects	300	Rat	Read across	20 day(s)	
citric 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
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 (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				

Chronic toxicity

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

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.

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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	<i>Pimephales promelas</i>	Method not given	96
alkylbenzenesulphonic acid	LC ₅₀	1 - 10	<i>Cyprinus carpio</i>	OECD 203	96
citric acid	LC ₅₀	440	<i>Leuciscus idus</i>	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			-
alkylbenzenesulphonic acid	EC ₅₀	1 - 10	<i>Daphnia magna</i> Straus	OECD 202	48
citric acid	EC ₅₀	1535	<i>Daphnia magna</i> 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	<i>Desmodesmus subspicatus</i>	OECD 201	72
citric acid	LC ₅₀	425	<i>Scenedesmus quadricauda</i>	Method not given	168

Aquatic short-term toxicity - marine species

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

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
sulphamic acid	EC ₁₀	> 1000	<i>Pseudomonas putida</i>	Method not given	16 hour(s)
alkylbenzenesulphonic acid		No data available			
citric acid	EC ₅₀	> 10000	<i>Pseudomonas putida</i>	Method not given	16 hour(s)

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sulphamic acid		No data available				
alkylbenzenesulphonic acid	NOEC	0.1 - 1	<i>Lepomis macrochirus</i>	Read across	28 day(s)	
citric acid		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sulphamic acid		No data available				
alkylbenzenesulphonic acid	NOEC	1 - 10	<i>Not specified</i>	Read across	32 day(s)	
citric acid		No data available				

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw)	Species	Method	Exposure time (days)	Effects observed
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		sediment)				
sulphamic acid		No data available			-	
alkylbenzenesulphonic acid		No data available			-	
citric 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
sulphamic acid		No data available			-	
alkylbenzenesulphonic acid	LD ₅₀	> 1000	<i>Eisenia fetida</i>	OECD 207	14	
citric acid		No data available			-	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sulphamic acid		No data available			-	
alkylbenzenesulphonic acid	EC ₅₀	167		OECD 208	21	
citric acid		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
sulphamic acid		No data available			-	
alkylbenzenesulphonic acid		No data available			-	
citric 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
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)	Method not given	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

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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.

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

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

Adsorption/Desorption to soil or sediment

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 mobility 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.
20 01 29* - detergents containing dangerous substances.

European Waste Catalogue:**Empty packaging****Recommendation:**

Dispose of observing national or local regulations.

Suitable cleaning agents:

Water, if necessary with cleaning agent.

SECTION 14: Transport information**ADR, RID, ADN, IMO/IMDG, ICAO/IATA****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):**Class:** 8**Label(s):** 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 73/78 and the IBC Code:** The product is not transported in bulk tankers.**Other relevant information:****ADR**

Domestos Professional Toilet Limescale Remover

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**

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

Ingredients according to EC Detergents Regulation 648/2004

anionic surfactants < 5%
perfumes

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: MSDS8040

Version: 02.0

Revision: 2015-04-21

Reason for revision:

Overall design adjusted in accordance with Amendment 453/2010, Annex II of Regulation (EC) No 1907/2006, This data sheet contains changes from the previous version in section(s):, 8

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 R, 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.
- R22 - Harmful if swallowed.
- R34 - Causes burns.
- R36 - Irritating to eyes.
- R38 - Irritating to skin.
- R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

End of Safety Data Sheet