



Shield 3 Way Toilet Cleaner

Revision: 2018-01-25

Version: 01.1

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

1.1 Product identifier

Trade name: Shield 3 Way Toilet Cleaner

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

Identified uses:

For professional use only.

AISE-P305 - Sanitary cleaner. 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

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

For medical or environmental emergency only:

call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Skin Irrit. 2 (H315)

Eye Dam. 1 (H318)

Aquatic Chronic 3 (H412)

Met. Corr. 1 (H290)

2.2 Label elements



Signal word: Danger.

Contains alkyl alcohol ethoxylate (C9-11 Pareth-6).

Hazard statements:

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

H412 - Harmful to aquatic life with long lasting effects.

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

Shield 3 Way Toilet Cleaner

3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
phosphoric acid	231-633-2	7664-38-2	01-2119485924-24	Skin Corr. 1B (H314) Met. Corr. 1 (H290)		3-10
alkyl alcohol ethoxylate	Polymer*	68439-46-3	[4]	Acute Tox. 4 (H302) Eye Dam. 1 (H318)		3-10
alkyldimethylbenzylammoniumchloride	270-325-2	68424-85-1	No data available	Skin Corr. 1B (H314) Acute Tox. 4 (H302) Acute Tox. 4 (H312) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)		1-3

* Polymer.

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.

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation:	Get medical attention or advice if you feel unwell.
Skin contact:	Wash skin with plenty of lukewarm, gently flowing water. Take off immediately all contaminated clothing and wash it before re-use. If skin irritation occurs: Get medical advice or attention.
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. 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.

6.2 Environmental precautions

Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. Dilute with plenty of water. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

6.3 Methods and material for containment and cleaning up

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

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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 advised by Diversey. 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:

Ingredient(s)	UK - Long term value(s)	UK - Short term value(s)
phosphoric acid	1 mg/m ³	2 mg/m ³

Biological limit values, 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
phosphoric acid	-	-	-	-
alkyl alcohol ethoxylate	-	-	-	-
alkyldimethylbenzylammoniumchloride	-	-	-	3.4

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)
phosphoric acid	No data available	-	No data available	-
alkyl alcohol ethoxylate	-	-	-	-
alkyldimethylbenzylammoniumchloride	-	-	-	5.7

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)
phosphoric acid	No data available	-	No data available	-
alkyl alcohol ethoxylate	-	-	-	-
alkyldimethylbenzylammoniumchloride	-	-	-	3.4

DNEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
phosphoric acid	-	-	2.92	-
alkyl alcohol ethoxylate	-	-	-	-
alkyldimethylbenzylammoniumchloride	-	-	-	3.96

DNEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
phosphoric acid	-	-	0.73	-
alkyl alcohol ethoxylate	-	-	-	-
alkyldimethylbenzylammoniumchloride	-	-	-	1.64

Environmental exposure

Environmental exposure - PNEC

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Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
phosphoric acid	-	-	-	-
alkyl alcohol ethoxylate	-	-	-	-
alkyldimethylbenzylammoniumchloride	0.0009	0.00009	0.00016	0.4

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m ³)
phosphoric acid	-	-	-	-
alkyl alcohol ethoxylate	-	-	-	-
alkyldimethylbenzylammoniumchloride	0.267	0.0267	7	-

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 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:

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

Physical State: Liquid

Colour: Opaque, 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

Method / remark

ISO 4316

Not relevant to classification of this product

See substance data

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
phosphoric acid	158	Method not given	1013
alkyl alcohol ethoxylate	> 232.2	Method not given	
alkyldimethylbenzylammoniumchloride	> 107	Method not given	

Method / remark

Flash point (°C): Not applicable.

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

See substance data

Substance data, flammability or explosive limits, if available:

Ingredient(s)	Lower limit (% vol)	Upper limit (% vol)
alkyldimethylbenzylammoniumchloride	-	-

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Vapour pressure: Not determined

Method / remark

See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
phosphoric acid	4	Method not given	20
alkyl alcohol ethoxylate	< 10	Method not given	37.8
alkyldimethylbenzylammoniumchloride	2300	Method not given	20

Vapour density: Not determined

Relative density: ≈ 1.055 (20 °C)

Solubility in / Miscibility with Water: Fully miscible

Method / remark

Not relevant to classification of this product
OECD 109 (EU A.3)

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
phosphoric acid	Soluble		
alkyl alcohol ethoxylate	100 Soluble	Method not given	
alkyldimethylbenzylammoniumchloride	Soluble	Method not given	

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

Autoignition temperature: Not determined

Decomposition temperature: Not applicable.

Viscosity: ≈ 58 mPa.s (20 °C)

Explosive properties: Not explosive.

Oxidising properties: Not oxidising.

Method / remark**9.2 Other information**

Surface tension (N/m): Not determined

Corrosion to metals: Corrosive

Not relevant to classification of this product
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): >5000

ATE - Dermal (mg/kg): >5000

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

Acute toxicity

Acute oral toxicity

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Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
phosphoric acid	LD ₅₀	2600	Rat	OECD 423 (EU B.1 tris)	
alkyl alcohol ethoxylate	LD ₅₀	300 - 2000		Method not given	
alkyldimethylbenzylammoniumchloride	LD ₅₀	398	Rat		

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
phosphoric acid	LD ₅₀	2740	Rabbit	Method not given	
alkyl alcohol ethoxylate	LD ₅₀	2000 - 5000	Rat	Method not given	
alkyldimethylbenzylammoniumchloride	LD ₅₀	800 - 1420	Rat	Method not given	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
phosphoric acid	LC ₅₀	850	Rat	Method not given	2
alkyl alcohol ethoxylate		No data available			
alkyldimethylbenzylammoniumchloride		No data available			

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
phosphoric acid	Corrosive	Rabbit	OECD 404 (EU B.4)	
alkyl alcohol ethoxylate	Not irritant		Method not given	
alkyldimethylbenzylammoniumchloride	Corrosive		Method not given	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
phosphoric acid	Severe damage	Rabbit	Method not given	
alkyl alcohol ethoxylate	Severe damage	Rabbit	Method not given	
alkyldimethylbenzylammoniumchloride	Severe damage		Method not given	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
phosphoric acid	No data available			
alkyl alcohol ethoxylate	No data available			
alkyldimethylbenzylammoniumchloride	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
phosphoric acid	Not sensitising	Human	Human experience	
alkyl alcohol ethoxylate	Not sensitising	Guinea pig	Method not given	
alkyldimethylbenzylammoniumchloride	Not sensitising		Method not given	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
phosphoric acid	No data available			
alkyl alcohol ethoxylate	No data available			
alkyldimethylbenzylammoniumchloride	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)
phosphoric acid	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) OECD 473 OECD 476 (Mouse lymphoma)	No data available	
alkyl alcohol ethoxylate	No evidence for mutagenicity, negative test results	OECD 473	No data available	
alkyldimethylbenzylammoniumchloride	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	

Carcinogenicity

Ingredient(s)	Effect
phosphoric acid	No data available
alkyl alcohol ethoxylate	No evidence for carcinogenicity, negative test results

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alkyldimethylbenzylammoniumchloride	No data available
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Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
phosphoric acid	NOAEL	Developmental toxicity	410	Rat	OECD 422, oral	10 day(s)	No evidence for reproductive toxicity No evidence for developmental toxicity
alkyl alcohol ethoxylate	NOAEL		> 250	Rat	Not known		No effects on fertility No developmental toxicity
alkyldimethylbenzylammoniumchloride			No data available				

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
phosphoric acid	NOAEL	250	Rat	OECD 422, oral		
alkyl alcohol ethoxylate	NOAEL	80 - 400		Method not given		
alkyldimethylbenzylammoniumchloride		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
phosphoric acid		No data available				
alkyl alcohol ethoxylate	NOAEL	80		OECD 411 (EU B.28)	90	
alkyldimethylbenzylammoniumchloride		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
phosphoric acid		No data available				
alkyl alcohol ethoxylate		No data available				
alkyldimethylbenzylammoniumchloride		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
phosphoric acid			No data available					
alkyl alcohol ethoxylate			No data available					
alkyldimethylbenzylammoniumchloride			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
phosphoric acid	No data available
alkyl alcohol ethoxylate	No data available
alkyldimethylbenzylammoniumchloride	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
phosphoric acid	No data available
alkyl alcohol ethoxylate	No data available
alkyldimethylbenzylammoniumchloride	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

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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)
phosphoric acid	LC ₅₀	138	<i>Gambusia affinis</i>	Method not given	96
alkyl alcohol ethoxylate	LC ₅₀	5 - 7	<i>Fish</i>	92/69/EEC, C1, semi-static	96
alkyldimethylbenzylammoniumchloride	LC ₅₀	> 0.1-1	<i>Fish</i>	Method not given	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
phosphoric acid	EC ₅₀	> 100	<i>Daphnia magna Straus</i>	OECD 202 (EU C.2)	48
alkyl alcohol ethoxylate	EC ₅₀	5.3	<i>Daphnia</i>	92/69/EEC	48
alkyldimethylbenzylammoniumchloride	EC ₅₀	0.02	<i>Daphnia</i>	Method not given	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
phosphoric acid	EC ₅₀	> 100	<i>Desmodesmus subspicatus</i>	OECD 201 (EU C.3)	72
alkyl alcohol ethoxylate	EC ₅₀	1.4 - 47	<i>Not specified</i>	92/69/EEC	72
alkyldimethylbenzylammoniumchloride	EC ₅₀	0.06	<i>Pseudokirchneriella subcapitata</i>	OECD 201 (EU C.3)	96

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
phosphoric acid		No data available			-
alkyl alcohol ethoxylate		No data available			-
alkyldimethylbenzylammoniumchloride		No data available			-

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
phosphoric acid	EC ₅₀	270	<i>Activated sludge</i>	Method not given	
alkyl alcohol ethoxylate	EC ₅₀	> 140	<i>Bacteria</i>	Method not given	3 hour(s)
alkyldimethylbenzylammoniumchloride	EC ₂₀	10	<i>Activated sludge</i>	OECD 209	0.5 hour(s)

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
phosphoric acid		No data available				
alkyl alcohol ethoxylate	EC ₁₀	8.983	<i>Not specified</i>	Method not given	21 day(s)	
alkyldimethylbenzylammoniumchloride		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
phosphoric acid		No data available				
alkyl alcohol ethoxylate	EC ₁₀	2.579	<i>Daphnia sp.</i>	Method not given	21 day(s)	
alkyldimethylbenzylammoniumchloride		No data available				

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

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
phosphoric acid		No data available			-	
alkyl alcohol ethoxylate		No data available			-	

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alkyldimethylbenzylammoniumchloride		No data available			-	
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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
phosphoric acid		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
alkyldimethylbenzylammoniumchloride		No data available			-	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
phosphoric acid		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
alkyldimethylbenzylammoniumchloride		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
phosphoric acid		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
alkyldimethylbenzylammoniumchloride		No data available			-	

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
phosphoric acid		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
alkyldimethylbenzylammoniumchloride		No data available			-	

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
phosphoric acid		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
alkyldimethylbenzylammoniumchloride		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
phosphoric acid					Not applicable (inorganic substance)
alkyl alcohol ethoxylate			60 % in 28 day(s)	Method not given	Readily biodegradable
alkyldimethylbenzylammoniumchloride		Oxygen depletion	> 60%	Read across	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

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Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
phosphoric acid	No data available		No bioaccumulation expected	
alkyl alcohol ethoxylate	3.11 - 4.19	Method not given	High potential for bioaccumulation	
alkyldimethylbenzylammoniumchloride	0.5 - 1.58	Method not given	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
phosphoric acid	No data available			No bioaccumulation expected	
alkyl alcohol ethoxylate	< 500		Method not given	High potential for bioaccumulation	
alkyldimethylbenzylammoniumchloride	0.5		Method not given	No bioaccumulation expected	

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
phosphoric acid	No data available				Potential for mobility in soil, soluble in water
alkyl alcohol ethoxylate	No data available				Potential for mobility in soil, soluble in water
alkyldimethylbenzylammoniumchloride	No data available				

12.5 Results of PBT and vPvB assessment

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

12.6 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**
Waste from residues / unused products:

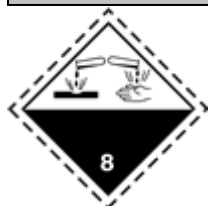
The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.
20 01 29* - detergents 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**Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)****14.1 UN number:** 1805**14.2 UN proper shipping name:**

Phosphoric acid, solution

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 and the IBC Code:** The product is not transported in bulk tankers.**Other relevant information:****ADR****Classification code:** C1**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

Shield 3 Way Toilet Cleaner

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.

Ingredients according to EC Detergents Regulation 648/2004

non-ionic surfactants, cationic surfactants < 5 %
 perfumes, Benzyl Salicylate, Butylphenyl Methylpropional, Hexyl Cinnamal, Limonene

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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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:

- H400 - Very toxic to aquatic life.
- H312 - Harmful in contact with skin.
- H314 - Causes severe skin burns and eye damage.
- H290 - May be corrosive to metals.
- H302 - Harmful if swallowed.
- H318 - Causes serious eye damage.
- H410 - Very toxic 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

End of Safety Data Sheet