



## Shield 3 Way Toilet Cleaner

Revision: 2021-02-16

Version: 01.0 Pending Annex II review

### 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

**Product use:** Toilet bowl cleaner.  
No specific claim criteria.  
For professional use only.

**Uses advised against:** Uses other than those identified are not recommended.

#### SWED - Sector-specific worker exposure description :

AISE\_SWED\_PW\_10\_1  
AISE\_SWED\_PW\_19\_1

UFI: FCMG-K1H4-X008-UGNW

#### 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

Aquatic Chronic 3 (H412)

#### 2.2 Label elements

##### Hazard statements:

H412 - Harmful to aquatic life with long lasting effects.

#### 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
phosphoric acid	231-633-2	7664-38-2	01-2119485924-24	Skin Corr. 1B (H314) Eye Dam. 1 (H318) Met. Corr. 1 (H290)		3-10
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	268-074-9	-	01-2119970170-45	Acute Tox. 3 (H311) Skin Corr. 1C (H314) Acute Tox. 4 (H302) Eye Dam. 1 (H318) Aquatic Acute 1 M=10 (H400) Aquatic Chronic 1 (H410)		0.1-1

## Shield 3 Way Toilet Cleaner

**Specific concentration limits**

phosphoric acid:

- Met. Corr. 1 (H290) >= 25%
- Eye Dam. 1 (H318) >= 25% > Eye Irrit. 2 (H319) >= 10%
- Skin Corr. 1B (H314) >= 25% > Skin Irrit. 2 (H315) >= 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.

ATE, if available, are listed in section 11..

**SECTION 4: First aid measures****4.1 Description of first aid measures**

<b>Inhalation:</b>	Get medical attention or advice if you feel unwell.
<b>Skin contact:</b>	Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.
<b>Eye contact:</b>	Rinse cautiously with water for several minutes. If irritation occurs and persists, get medical attention.
<b>Ingestion:</b>	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.
<b>Self-protection of first aider:</b>	Consider personal protective equipment as indicated in subsection 8.2.

**4.2 Most important symptoms and effects, both acute and delayed**

<b>Inhalation:</b>	No known effects or symptoms in normal use.
<b>Skin contact:</b>	No known effects or symptoms in normal use.
<b>Eye contact:</b>	No known effects or symptoms in normal use.
<b>Ingestion:</b>	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. 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**

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:**

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. 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. 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 <sup>3</sup>	2 mg/m <sup>3</sup>

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
phosphoric acid	-	-	-	-
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	-	-	-	2.83

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	-
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	No data available	-	No data available	4.7

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	-
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	No data available	-	No data available	2.83

DNEL inhalatory exposure - Worker (mg/m<sup>3</sup>)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
phosphoric acid	-	-	2.92	1
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	-	-	-	3.32

DNEL inhalatory exposure - Consumer (mg/m<sup>3</sup>)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
phosphoric acid	-	-	0.73	-
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	-	-	-	0.98

## 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)
phosphoric acid	-	-	-	-
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	0.00068	0.000068	0	1.1

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Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m <sup>3</sup> )
phosphoric acid	-	-	-	-
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	9.57	0.957	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:** No special requirements under normal use conditions.

## REACH use scenarios considered for the undiluted product:

Contributing scenario, undiluted	SWED - Sector-specific worker exposure description	LCS	PROC	Duration (min)	ERC
Manual application by brushing, wiping or mopping	AISE_SWED_PW_10_1	PW	PROC 10	480	ERC8a
Manual application	AISE_SWED_PW_19_1	PW	PROC 19	480	ERC8a

## Personal protective equipment

**Eye / face protection:** Safety glasses are not normally required. However, their use is recommended in those cases where splashes may occur when handling the product (EN 166).

**Hand protection:** No special requirements under normal use conditions.

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

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

**Environmental exposure controls:** 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 , Blue

**Odour:** Product specific

**Odour threshold:** Not applicable

**Melting point/freezing point (°C):** Not determined

Not relevant to classification of this product

**Initial boiling point and boiling range (°C):** Not determined

See substance data

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
phosphoric acid	158	Method not given	1013
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	No data available		

## Method / remark

**Flammability (solid, gas):** Not applicable to liquids

**Flammability (liquid):** Not flammable.

**Flash point (°C):** Not applicable.

**Sustained combustion:** Not applicable.

( UN Manual of Tests and Criteria, section 32, L.2 )

**Lower and upper explosion limit/flammability limit (%):** Not determined

Substance data, flammability or explosive limits, if available:

## Method / remark

**Autoignition temperature:** 99

**Decomposition temperature:** Not applicable.

**pH < 2** (neat)

**Kinematic viscosity:** ≈ 60 mPa.s (20 °C)

**Solubility in / Miscibility with Water:** Fully miscible

ISO 4316

DM-006 Viscosity - Standard

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Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
phosphoric acid	Soluble		
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	No data available		

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

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
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	No data available		

Relative density:  $\approx 1.05$  (20 °C)

Relative vapour density: Not determined.

Particle characteristics: No data available.

## Method / remark

OECD 109 (EU A.3)

Not relevant to classification of this product

Not applicable to liquids.

## 9.2 Other information

## 9.2.1 Information with regard to physical hazard classes

Explosive properties: Not explosive.

Oxidising properties: Not oxidising.

Corrosion to metals: Not corrosive

Weight of evidence

## 9.2.2 Other safety characteristics

No other relevant information available.

## SECTION 10: Stability and reactivity

## 10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

## 10.2 Chemical stability

Stable under normal storage and use conditions.

## 10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

## 10.4 Conditions to avoid

None known under normal storage and use conditions.

## 10.5 Incompatible materials

Reacts with alkali.

## 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): &gt;2000

ATE - Dermal (mg/kg): &gt;2000

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

## Acute toxicity

Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
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phosphoric acid	LD <sub>50</sub>	> 300-5000	Rat	OECD 423 (EU B.1 tris)		Not established
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	LD <sub>50</sub>	630	Rat	OECD 401 (EU B.1)		51000

## Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
phosphoric acid	LD <sub>50</sub>	2740	Rabbit	Method not given		Not established
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	LD <sub>50</sub>	582	Rabbit	OECD 402 (EU B.3)		30000

## Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
phosphoric acid	LC <sub>50</sub>	850	Rat	Method not given	2
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides		No data available			

## Acute inhalative toxicity, continued

Ingredient(s)	ATE - inhalation, dust (mg/l)	ATE - inhalation, mist (mg/l)	ATE - inhalation, vapour (mg/l)	ATE - inhalation, gas (mg/l)
phosphoric acid	Not established	Not established	Not established	Not established
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	Not established	Not established	Not established	Not established

## Irritation and corrosivity

## Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
phosphoric acid	Corrosive	Rabbit	OECD 404 (EU B.4)	
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	Corrosive	Rabbit	OECD 404 (EU B.4)	1-4 hour(s)

## Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
phosphoric acid	Severe damage	Rabbit	Method not given	
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	Severe damage			

## Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
phosphoric acid	No data available			
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	No data available			

## Sensitisation

## Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
phosphoric acid	Not sensitising	Human	Human experience	
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	

## Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
phosphoric acid	No data available			
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	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	
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	No data available		No data available	

## Carcinogenicity

Ingredient(s)	Effect
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phosphoric acid	No data available
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	No data available

## 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
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides			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		
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides		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				
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides		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				
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides		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					
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides			No data available					

## STOT-single exposure

Ingredient(s)	Affected organ(s)
phosphoric acid	No data available
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	No data available

## STOT-repeated exposure

Ingredient(s)	Affected organ(s)
phosphoric acid	No data available
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	No data available

## Aspiration hazard

Substances with an aspiration hazard (H304), if any, are listed in section 3.

## Potential adverse health effects and symptoms

Effects and symptoms related to the product, if any, are listed in subsection 4.2.

## 11.2 Information on other hazards

## 11.2.1 Endocrine disrupting properties

Ingredient(s)	Effect
phosphoric acid	No data available

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Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	No data available
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## 11.2.2 Other information

No other relevant information available.

## SECTION 12: Ecological information

## 12.1 Toxicity

No data is available on the mixture.

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

## Aquatic short-term toxicity

Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
phosphoric acid	LC <sub>50</sub>	138	<i>Gambusia affinis</i>	Method not given	96
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	LC <sub>50</sub>	> 0.1-1	<i>Oncorhynchus mykiss</i>	OECD 203 (EU C.1)	Nouryon ESDS 2019

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
phosphoric acid	EC <sub>50</sub>	> 100	<i>Daphnia magna</i> Straus	OECD 202 (EU C.2)	48
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	EC <sub>50</sub>	> 0.01-0.1	<i>Daphnia magna</i> Straus	OECD 202 (EU C.2)	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
phosphoric acid	EC <sub>50</sub>	> 100	<i>Desmodesmus subspicatus</i>	OECD 201 (EU C.3)	72
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	EC <sub>50</sub>	> 0.01-0.1	<i>Pseudokirchneriella subcapitata</i>	OECD 201 (EU C.3)	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
phosphoric acid		No data available			
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
phosphoric acid	EC <sub>50</sub>	270	<i>Activated sludge</i>	Method not given	
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides		No data available			

## 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				
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides		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				
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	NOEC	> 0.001-0.01	<i>Daphnia magna</i>	OECD 211	21 day(s)	



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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				
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides		No data available				

**Terrestrial toxicity**

Terrestrial toxicity - soil invertebrates, including earthworms, if available:

Terrestrial toxicity - plants, if available:

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity - soil bacteria, if available:

**12.2 Persistence and degradability****Abiotic degradation**

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

**Biodegradation**

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT <sub>50</sub>	Method	Evaluation
phosphoric acid					Not applicable (inorganic substance)
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	Activated sludge, aerobe	Oxygen depletion	71 % in 28 day(s)	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 K<sub>ow</sub>)

Ingredient(s)	Value	Method	Evaluation	Remark
phosphoric acid	No data available		No bioaccumulation expected	
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
phosphoric acid	No data available			No bioaccumulation expected	
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	No data available				

**12.4 Mobility in soil**

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log K <sub>oc</sub>	Desorption coefficient Log K <sub>oc</sub> (des)	Method	Soil/sediment type	Evaluation
phosphoric acid	No data available				Potential for mobility in soil, soluble in water
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	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.

## Shield 3 Way Toilet Cleaner

## 12.6 Endocrine disrupting properties

Ingredient(s)	Effect
phosphoric acid	No data available
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl)trimethyl, chlorides	No data available

## 12.7 Other adverse effects

No other adverse effects known.

## SECTION 13: Disposal considerations

## 13.1 Waste treatment methods

**Waste from residues / unused products:**

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

**European Waste Catalogue:**

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:** Non-dangerous goods

**14.2 UN proper shipping name:** Non-dangerous goods

**14.3 Transport hazard class(es):** Non-dangerous goods

**14.4 Packing group:** Non-dangerous goods

**14.5 Environmental hazards:** Non-dangerous goods

**14.6 Special precautions for user:** Non-dangerous goods

**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code:** Non-dangerous goods

## 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

cationic surfactants  
perfumes

< 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.

**Seveso - Classification:** Not classified

## 15.2 Chemical safety assessment

A chemical safety assessment has not been carried out on the mixture

## SECTION 16: Other information

*The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract*

**Shield 3 Way Toilet Cleaner****SDS code:** MS1005081**Version:** 01.0 Pending Annex II review**Revision:** 2021-02-16**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:**

- H290 - May be corrosive to metals.
- H302 - Harmful if swallowed.
- H311 - Toxic in contact with skin.
- H314 - Causes severe skin burns and eye damage.
- H400 - Very toxic to aquatic life.
- 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
- 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**