



## Shield 3 Way Toilet Cleaner

Revision: 2021-03-28

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

UFI: FCMG-K1H4-X008-UGNW

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

**Product use:** Toilet bowl cleaner.  
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

#### 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

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.

### 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.

ATE, if available, are listed in section 11.

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**

<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**

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

## Shield 3 Way Toilet Cleaner

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)	Long term value(s)	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

## Shield 3 Way Toilet Cleaner

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:

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

## 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.

Recommended safety measures for handling the diluted product:

**Recommended maximum concentration (% w/w):** 100

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

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

## Personal protective equipment

**Eye / face protection:** No special requirements under normal use conditions.

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

**Respiratory protection:** 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
<b>Physical State:</b> Liquid	
<b>Colour:</b> Clear , Blue	
<b>Odour:</b> Product specific	
<b>Odour threshold:</b> Not applicable	
<b>Melting point/freezing point (°C):</b> Not determined	Not relevant to classification of this product
<b>Initial boiling point and boiling range (°C):</b> 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

## Shield 3 Way Toilet Cleaner

Substance data, flammability or explosive limits, if available:

**Autoignition temperature:** 99  
**Decomposition temperature:** Not applicable.  
**pH:** < 2 (neat)  
**Kinematic viscosity:** ≈ 60 mPa.s (20 °C)  
**Solubility in / Miscibility with Water:** Fully miscible

**Method / remark**

ISO 4316  
 DM-006 Viscosity - Standard

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

**Method / remark**

See substance data

**Vapour pressure:** Not determined

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		

**Method / remark**

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

**Relative density:** ≈ 1.05 (20 °C)

**Relative vapour density:** -.

**Particle characteristics:** No data available.

**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**

None known under normal use conditions.

**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):**

## Shield 3 Way Toilet Cleaner

ATE - Oral (mg/kg): >2000  
 ATE - Dermal (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)	ATE (mg/kg)
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)

## Shield 3 Way Toilet Cleaner

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
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

## Shield 3 Way Toilet Cleaner

**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**

Endocrine disrupting properties - Human data, if available:

**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 Straus</i>	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 Straus</i>	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



## Shield 3 Way Toilet Cleaner

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)	

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

## Shield 3 Way Toilet Cleaner

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.

**12.6 Endocrine disrupting properties**

Endocrine disrupting properties - Environmental effects, if 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
- substances identified as having endocrine disrupting properties in accordance with the criteria set out in Delegated Regulation (EU) 2017/2100 or Regulation (EU) 2018/605

**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, anionic 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**

**Shield 3 Way Toilet Cleaner**

*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:** MS1005081**Version:** 01.1**Revision:** 2021-03-28**Reason for revision:**

This data sheet contains changes from the previous version in section(s):, 8, Overall design adjusted in accordance with Amendment 2020/878, Annex II of Regulation (EC) No 1907/2006

**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
- ATE - Acute Toxicity Estimate
- DNEL - Derived No Effect Limit
- EC50 - effective concentration, 50%
- ERC - Environmental release categories
- EUH - CLP Specific hazard statement
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- LCS - Life cycle stage
- LD50 - Lethal Dose, 50% / Median Lethal dose
- NOAEL - No observed adverse effect level
- NOEL - No observed effect level
- OECD - Organization for Economic Cooperation and Development
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- PROC - Process categories
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative

**End of Safety Data Sheet**