

**Suma Silver D8**

Revision: 2017-09-09

Version: 03.1

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

**1.1 Product identifier**

Trade name: Suma Silver D8

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

**Identified uses:**

For professional use only.

AISE-P316 - Metal cleaning agent. Manual process

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

**1.3 Details of the supplier of the safety data sheet**

**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**

Carc. 2 (H351)

Repr. 2 (H361)

Eye Irrit. 2 (H319)

Aquatic Chronic 3 (H412)

**2.2 Label elements**



**Signal word:** Warning.

Contains thiourea (Thiourea).

**Hazard statements:**

H351 - Suspected of causing cancer.

H361 - Suspected of damaging fertility or the unborn child.

H319 - Causes serious eye irritation.

H412 - Harmful to aquatic life with long lasting effects.

**Precautionary statements:**

P280 - Wear protective gloves, protective clothing and eye or face protection.

**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
thiourea	200-543-5	62-56-6	No data available	Carc. 2 (H351)		3-10

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				Repr. 2 (H361) Acute Tox. 4 (H302) Aquatic Chronic 2 (H411)	
citric acid	201-069-1	77-92-9	[1]	Eye Irrit. 2 (H319)	1-3
phosphoric acid	231-633-2	7664-38-2	01-2119485924-24	Skin Corr. 1B (H314) Met. Corr. 1 (H290)	1-3
alkyl alcohol ethoxylate	Polymer*	64425-86-1	[4]	Acute Tox. 4 (H302) Eye Dam. 1 (H318) Aquatic Acute 1 (H400)	1-3

\* Polymer.

For the full text of the 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

#### General Information:

IF exposed or concerned: Get medical attention or advice.

#### Inhalation:

Get medical attention or advice if you feel unwell.

#### Skin contact:

Wash skin with plenty of lukewarm, gently flowing water. 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. If irritation occurs and persists, get medical attention.

#### Ingestion:

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:

Suspected of causing cancer. Suspected of damaging fertility or the unborn child.

#### Skin contact:

Suspected of causing cancer. Suspected of damaging fertility or the unborn child.

#### Eye contact:

Causes severe irritation.

#### Ingestion:

Suspected of causing cancer. Suspected of damaging fertility or the unborn child.

### 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 suitable protective clothing, gloves and 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 onto dry sand or similar inert material.

### 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.

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**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. Store used personal protective equipment separately. Use personal protective equipment as required. Obtain special instructions before use. 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 <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
thiourea	No data available	No data available	No data available	No data available
citric acid	-	-	-	-
phosphoric acid	-	-	-	-
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available

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)
thiourea	No data available	No data available	No data available	No data available
citric acid	No data available	-	No data available	-
phosphoric acid	No data available	-	No data available	-
alkyl alcohol ethoxylate	No data available	No data available	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)
thiourea	No data available	No data available	No data available	No data available
citric acid	No data available	-	No data available	-
phosphoric acid	No data available	-	No data available	-
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available

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
thiourea	No data available	No data available	No data available	No data available
citric acid	-	-	-	-
phosphoric acid	-	-	2.92	-
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available

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
thiourea	No data available	No data available	No data available	No data available
citric acid	-	-	-	-
phosphoric acid	-	-	0.73	-
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available

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## 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)
thiourea	No data available	No data available	No data available	No data available
citric acid	0.44	0.044	-	> 1000
phosphoric acid	-	-	-	-
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m <sup>3</sup> )
thiourea	No data available	No data available	No data available	No data available
citric acid	34.6	3.46	33.1	-
phosphoric acid	-	-	-	-
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available

## 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:  $\geq$  480 min  
 Material thickness:  $\geq$  0.7 mm  
 Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time:  $\geq$  30 min  
 Material thickness:  $\geq$  0.4 mm  
 In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.

**Body protection:** Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur (EN 14605).

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

**Environmental exposure controls:** Should not reach sewage water or drainage ditch undiluted or unneutralised.

## SECTION 9: Physical and chemical properties

## 9.1 Information on basic physical and chemical properties

Information in this section refers to the product, unless it is specifically stated that substance data is listed

	Method / remark
<b>Physical State:</b> Liquid	
<b>Colour:</b> Clear, Orange	
<b>Odour:</b> Product specific	
<b>Odour threshold:</b> Not applicable	
<b>pH:</b> $\leq$ 2 (neat)	
<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	

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
thiourea	Product decomposes before boiling		
citric acid	No data available		
phosphoric acid	158	Method not given	1013
alkyl alcohol ethoxylate	No data available		

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  
**Flammability (solid, gas):** Not applicable to liquids  
**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)
thiourea	333		
citric acid	No data available		
phosphoric acid	4	Method not given	20
alkyl alcohol ethoxylate	No data available		

**Method / remark**

**Vapour density:** Not determined  
**Relative density:** ≈ 1.03 (20 °C)  
**Solubility in / Miscibility with Water:** Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
thiourea	140		
citric acid	1630	Method not given	
phosphoric acid	Soluble		
alkyl alcohol ethoxylate	No data available		

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

**Method / remark**

**Autoignition temperature:** Not determined  
**Decomposition temperature:** Not applicable.  
**Viscosity:** Not determined  
**Explosive properties:** Not explosive.  
**Oxidising properties:** Not oxidising.

**9.2 Other information**

**Surface tension (N/m):** Not determined  
**Corrosion to metals:** Not determined

Not relevant to classification of this product

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. 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):**

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)
thiourea	LD <sub>50</sub>	1750	Rat	OECD 401 (EU B.1)	
citric acid	LD <sub>50</sub>	3000	Rat	Method not given	
phosphoric acid	LD <sub>50</sub>	2600	Rat	OECD 423 (EU B.1 tris)	
alkyl alcohol ethoxylate		No data available			

#### Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
thiourea	LD <sub>50</sub>	2800	Rat	Method not given OECD 402 (EU B.3)	
citric acid	LD <sub>50</sub>	> 2000	Rat	Method not given	
phosphoric acid	LD <sub>50</sub>	2740	Rabbit	Method not given	
alkyl alcohol ethoxylate		No data available			

#### Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
thiourea	LC <sub>50</sub>	> 0.195 (mist) No mortality observed	Rat	OECD 403 (EU B.2)	4
citric acid		No data available			
phosphoric acid	LC <sub>50</sub>	850	Rat	Method not given	2
alkyl alcohol ethoxylate		No data available			

### Irritation and corrosivity

#### Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
thiourea	No data available			
citric acid	Not irritant	Rabbit	OECD 404 (EU B.4)	
phosphoric acid	Corrosive	Rabbit	OECD 404 (EU B.4)	
alkyl alcohol ethoxylate	No data available			

#### Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
thiourea	Not corrosive or irritant			
citric acid	Severe damage	Rabbit	OECD 405 (EU B.5)	
phosphoric acid	Severe damage	Rabbit	Method not given	
alkyl alcohol ethoxylate	No data available			

#### Respiratory tract irritation and corrosivity

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

### Sensitisation

#### Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
thiourea	No data available			
citric acid	Not sensitising	Guinea pig	Method not given	
phosphoric acid	Not sensitising	Human	Human experience	
alkyl alcohol ethoxylate	No data available			

#### Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
thiourea	No data available			
citric acid	No data available			
phosphoric acid	No data available			
alkyl alcohol ethoxylate	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)
thiourea	No data available		No data available	
citric acid	No data available		No evidence of genotoxicity, negative test results	Method not given
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 data available		No data available	

**Carcinogenicity**

Ingredient(s)	Effect
thiourea	Limited evidence of a carcinogenic effect.
citric acid	No evidence for carcinogenicity, negative test results
phosphoric acid	No data available
alkyl alcohol ethoxylate	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
thiourea		Teratogenic effects	No data available				Indications of possible teratogenicity
citric acid			No data available				No evidence for reproductive toxicity
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			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
thiourea		No data available				
citric acid		No data available				
phosphoric acid	NOAEL	250	Rat	OECD 422, oral		
alkyl alcohol ethoxylate		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
thiourea		No data available				
citric acid		No data available				
phosphoric acid		No data available				
alkyl alcohol ethoxylate		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
thiourea		No data available				
citric acid		No data available				
phosphoric acid		No data available				
alkyl alcohol ethoxylate		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
thiourea			No data available					
citric acid			No data available					
phosphoric acid			No data					

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			available				
alkyl alcohol ethoxylate			No data available				

## STOT-single exposure

Ingredient(s)	Affected organ(s)
thiourea	Not applicable
citric acid	No data available
phosphoric acid	No data available
alkyl alcohol ethoxylate	No data available

## STOT-repeated exposure

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

**Aspiration hazard**

Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

**Potential adverse health effects and symptoms**

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

**SECTION 12: Ecological information****12.1 Toxicity**

No data is available on the mixture.

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

**Aquatic short-term toxicity**

Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
thiourea	LC <sub>50</sub>	> 110	<i>Fish</i>	OECD 203 (EU C.1)	96
citric acid	LC <sub>50</sub>	440	<i>Leuciscus idus</i>	Method not given	48
phosphoric acid	LC <sub>50</sub>	138	<i>Gambusia affinis</i>	Method not given	96
alkyl alcohol ethoxylate		No data available			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
thiourea	EC <sub>50</sub>	16	<i>Daphnia magna Straus</i>	OECD 202 (EU C.2)	48
citric acid	EC <sub>50</sub>	1535	<i>Daphnia magna Straus</i>	Method not given	24
phosphoric acid	EC <sub>50</sub>	> 100	<i>Daphnia magna Straus</i>	OECD 202 (EU C.2)	48
alkyl alcohol ethoxylate		No data available			

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
thiourea	EC <sub>50</sub>	> 110	<i>Not specified</i>	OECD 201 (EU C.3)	-
citric acid	LC <sub>50</sub>	425	<i>Scenedesmus quadricauda</i>	Method not given	168
phosphoric acid	EC <sub>50</sub>	> 100	<i>Desmodesmus subspicatus</i>	OECD 201 (EU C.3)	72
alkyl alcohol ethoxylate		No data available			

Aquatic short-term toxicity - marine species

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



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		available		
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## Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
thiourea		No data available			
citric acid	EC <sub>50</sub>	> 10000	<i>Pseudomonas putida</i>	Method not given	16 hour(s)
phosphoric acid	EC <sub>50</sub>	270	<i>Activated sludge</i>	Method not given	
alkyl alcohol ethoxylate		No data available			

## Aquatic long-term toxicity

## Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
thiourea		No data available				
citric acid		No data available				
phosphoric acid		No data available				
alkyl alcohol ethoxylate		No data available				

## Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
thiourea		No data available				
citric acid		No data available				
phosphoric acid		No data available				
alkyl alcohol ethoxylate		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
thiourea		No data available			-	
citric acid		No data available			-	
phosphoric acid		No data available			-	
alkyl alcohol ethoxylate		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
thiourea		No data available			-	
citric acid		No data available			-	
phosphoric acid		No data available			-	

## Terrestrial toxicity - plants, if available:

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

## Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
thiourea		No data available			-	
citric acid		No data available			-	

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		available				
phosphoric 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
thiourea		No data available			-	
citric acid		No data available			-	
phosphoric 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
thiourea		No data available			-	
citric acid		No data available			-	
phosphoric 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 <sub>50</sub>	Method	Evaluation
thiourea					Not readily biodegradable.
citric acid			97 % in 28 day(s)	Method not given	Readily biodegradable
phosphoric acid					Not applicable (inorganic substance)
alkyl alcohol ethoxylate				OECD 301B	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
thiourea	-1.14	Method not given	No bioaccumulation expected	
citric acid	-1.72		No bioaccumulation expected	
phosphoric acid	No data available		No bioaccumulation expected	
alkyl alcohol ethoxylate	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
thiourea	No data available				
citric acid	No data available				
phosphoric acid	No data available			No bioaccumulation expected	
alkyl alcohol ethoxylate	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
thiourea	No data available				High potential for mobility in soil
citric acid	No data available				Potential for mobility in soil, soluble in water
phosphoric acid	No data available				Potential for mobility in soil, soluble in water
alkyl alcohol ethoxylate	No data available				

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**12.5 Results of PBT and vPvB assessment**

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

**12.6 Other adverse effects**

No other adverse effects known.

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

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

**European Waste Catalogue:**

20 01 14\* - acids.

**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. 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 1272/2008 - CLP
- Regulation (EC) No. 1907/2006 - REACH
- 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**

anionic surfactants, non-ionic surfactants

< 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.

**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:** MSDS6980**Version:** 03.1**Revision:** 2017-09-09**Reason for revision:**

This data sheet contains changes from the previous version in section(s):, 2, 3, 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.
- H314 - Causes severe skin burns and eye damage.
- H318 - Causes serious eye damage.
- H319 - Causes serious eye irritation.
- H351 - Suspected of causing cancer.
- H361 - Suspected of damaging fertility or the unborn child.
- H400 - Very toxic to aquatic life.
- H411 - 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**