

## Suma Silver D8

Revision: 2024-08-02

Version: 01.1

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

#### 1.1 Product identifier

**Trade name:** Suma Silver D8

UFI: M3JE-90UF-800C-CRRF

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

**Product use:** Metal cleaning agent.  
For professional use only.

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

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

AISE\_SWED\_PW\_4\_2  
AISE\_SWED\_PW\_19\_2

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

Diversey Europe Operations BV, De Corridor 4, 3621ZB Breukelen [Maarssebroeksedijk 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@solenis.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

Carcinogenicity, Category 2 (H351)  
Reproductive toxicity, Category 2 (H361)  
Eye irritation, Category 2 (H319)  
Chronic aquatic toxicity, Category 3 (H412)

#### 2.2 Label elements



**Signal word:** Warning.

Contains thiourea (Thiourea)

#### Hazard statements:

H319 - Causes serious eye irritation.  
H351 - Suspected of causing cancer.  
H361 - Suspected of damaging fertility or the unborn child.  
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.

Reportable explosives precursor - Control of Poisons and Explosives Precursors Regulations 2015

**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	-	Carcinogenicity, Category 2 (H351) Reproductive toxicity, Category 2 (H361) Acute toxicity - Oral, Category 4 (H302) Chronic aquatic toxicity, Category 2 (H411)		3-10
Citric acid	201-069-1	-	01-211945702 6-42	Specific target organ toxicity - Single exposure, Category 3 (H335) Eye irritation, Category 2 (H319)		1-3
phosphoric acid	231-633-2	7664-38-2	01-211948592 4-24	Skin corrosion, Category 1B (H314) Acute toxicity - Oral, Category 4 (H302) Serious eye damage, Category 1 (H318) Corrosive to metals, Category 1 (H290)		1-3
Alcohols, C10-16, ethoxylated (7-<15 EO)	[4]	68002-97-1	[4]	Acute toxicity - Oral, Category 4 (H302) Serious eye damage, Category 1 (H318) Chronic aquatic toxicity, Category 3 (H412)		1-3

**Specific concentration limits**

phosphoric acid:

- Serious eye damage, Category 1 (H318) >= 25% > Eye irritation, Category 2 (H319) >= 10%
- Skin corrosion, Category 1B (H314) >= 25% > Skin irritation, Category 2 (H315) >= 10%

Workplace exposure limit(s), if available, are listed in subsection 8.1.

ATE, if available, are listed in section 11.

[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****General Information:**

IF exposed or concerned: Get medical advice or attention.

**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:**

Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation occurs and persists, get medical attention.

**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:**

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. Wear eye/face protection. Wear suitable gloves.

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**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). 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. Store used personal protective equipment separately. Obtain special instructions before use. Avoid contact with eyes. 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/DMEL 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	-	-	-	0.1
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-

DNEL/DMEL 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	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	No data available	-

DNEL/DMEL 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	-

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phosphoric acid	No data available	-	No data available	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	No data available	-

DNEL/DMEL 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	1
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-

DNEL/DMEL 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	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-

## 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	-	-	-	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-

## 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	-	-	-	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-

## 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.

## REACH use scenarios considered for the undiluted product:

	SWED - Sector-specific worker exposure description	LCS	PROC	Duration (min)	ERC
Manual application	AISE_SWED_PW_19_2	PW	PROC 19	480	ERC8a
Automatic application in a dedicated system	AISE_SWED_PW_4_2	PW	PROC 4	480	ERC8a

## Personal protective equipment

## Eye / face protection:

Safety glasses or goggles (EN 16321 / 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:

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:

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

**Physical state:** Liquid

**Colour:** Clear , Orange

**Odour:** Product specific

**Odour threshold:** Not applicable

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

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

#### Method / remark

Not relevant to classification of this product  
See substance data

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
Alcohols, C10-16, ethoxylated (7-<15 EO)	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:** Not determined

**Decomposition temperature:** Not applicable.

**pH:** =< 2 (neat)

**Kinematic viscosity:** Not determined

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

ISO 4316

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
thiourea	140		
Citric acid	1630	Method not given	
phosphoric acid	Soluble		
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available		

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

#### Method / remark

**Vapour pressure:** Not determined

See substance data

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
Alcohols, C10-16, ethoxylated (7-<15 EO)	< 0.15		20

#### Method / remark

**Relative density:** ≈ 1.03 (20 °C)

**Relative vapour density:** -.

**Particle characteristics:** No data available.

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

**9.2.2 Other safety characteristics**

Acid reserve:  $\approx$  -0.6 (g NaOH / 100g; pH=4)

**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**

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 hazard classes as defined in Regulation (EC) No 1272/2008**

Mixture data: .

**Relevant calculated ATE(s):**

ATE - Oral (mg/kg): >2000

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

**Acute toxicity**

Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE Oral (mg/kg)
thiourea	LD <sub>50</sub>	1750	Rat	OECD 401 (EU B.1)		1750
Citric acid	LD <sub>50</sub>	5400-11700	Rat	Method not given		Not established
phosphoric acid	LD <sub>50</sub>	> 300-5000	Rat	OECD 423 (EU B.1 tris)		2600
Alcohols, C10-16, ethoxylated (7-<15 EO)	LD <sub>50</sub>	300-2000	Rat	Weight of evidence		1000

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE Dermal (mg/kg)
thiourea	LD <sub>50</sub>	2800	Rat	Method not given OECD 402 (EU B.3)		Not established
Citric acid	LD <sub>50</sub>	> 2000	Rat	Method not given		Not established
phosphoric acid	LD <sub>50</sub>	2740	Rabbit	Method not given		Not established
Alcohols, C10-16, ethoxylated (7-<15 EO)	LD <sub>50</sub>	> 2000		Method not given		Not established

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
Alcohols, C10-16, ethoxylated (7-<15 EO)		No data available			

Acute inhalative toxicity, continued

Ingredient(s)	ATE - inhalation, dust	ATE - inhalation, mist	ATE - inhalation,	ATE - inhalation, gas

	(mg/l)	(mg/l)	vapour (mg/l)	(mg/l)
thiourea	Not established	Not established	Not established	Not established
Citric acid	Not established	Not established	Not established	Not established
phosphoric acid	Not established	Not established	Not established	Not established
Alcohols, C10-16, ethoxylated (7-<15 EO)	Not established	Not established	Not established	Not established

**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)	
Alcohols, C10-16, ethoxylated (7-<15 EO)	Not irritant	Rabbit	Method not given	

## Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
thiourea	Not corrosive or irritant			
Citric acid	Severe damage Irritant	Rabbit	OECD 405 (EU B.5)	
phosphoric acid	Severe damage	Rabbit	Method not given	
Alcohols, C10-16, ethoxylated (7-<15 EO)	Severe damage	Rabbit	Method not given	

## 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			
Alcohols, C10-16, ethoxylated (7-<15 EO)	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	
Alcohols, C10-16, ethoxylated (7-<15 EO)	Not sensitising	Guinea pig	Method not given	

## Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
thiourea	No data available			
Citric acid	No data available			
phosphoric acid	No data available			
Alcohols, C10-16, ethoxylated (7-<15 EO)	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	
Alcohols, C10-16, ethoxylated (7-<15 EO)	No evidence for mutagenicity, negative test results	Method not given	No evidence for mutagenicity, negative test results	Method not given

## 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
Alcohols, C10-16, ethoxylated (7-<15 EO)	No evidence for carcinogenicity, weight-of-evidence

## Toxicity for reproduction

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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
Alcohols, C10-16, ethoxylated (7-<15 EO)			No data available		Literature		No evidence for teratogenic effects No evidence for reproductive toxicity

**Repeated dose toxicity**

Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
thiourea		No data available				
Citric acid		No data available				
phosphoric acid	NOAEL	250	Rat	OECD 422, oral		
Alcohols, C10-16, ethoxylated (7-<15 EO)		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				
Alcohols, C10-16, ethoxylated (7-<15 EO)		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				
Alcohols, C10-16, ethoxylated (7-<15 EO)		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 available					
Alcohols, C10-16, ethoxylated (7-<15 EO)			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
thiourea	Not applicable
Citric acid	No data available
phosphoric acid	No data available
Alcohols, C10-16, ethoxylated (7-<15 EO)	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
Alcohols, C10-16, ethoxylated (7-<15 EO)	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**

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)
thiourea	LC <sub>50</sub>	> 110	Fish	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
Alcohols, C10-16, ethoxylated (7-<15 EO)	LC <sub>50</sub>	> 1-10	<i>Brachydanio rerio</i>	Method not given	96

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
Alcohols, C10-16, ethoxylated (7-<15 EO)	EC <sub>50</sub>	> 1-10	<i>Daphnia magna Straus</i>	Method not given	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
thiourea	EC <sub>50</sub>	> 110	Not specified	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
Alcohols, C10-16, ethoxylated (7-<15 EO)	EC <sub>50</sub>	> 1-10	<i>Desmodesmus subspicatus</i>	Method not given	72

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			
Alcohols, C10-16, ethoxylated (7-<15 EO)		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
thiourea		No data available			

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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	
Alcohols, C10-16, ethoxylated (7-<15 EO)	EC <sub>50</sub>	140	<i>Activated sludge</i>	Method not given	

**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				
Alcohols, C10-16, ethoxylated (7-<15 EO)		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				
Alcohols, C10-16, ethoxylated (7-<15 EO)	EC <sub>10</sub>	> 0.1-1	<i>Daphnia sp.</i>	OECD 211		

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				
Alcohols, C10-16, ethoxylated (7-<15 EO)		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
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
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
Citric acid		No data 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
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
Citric acid		No data available				
phosphoric acid		No data available				

## 12.2 Persistence and degradability

### Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Ingredient(s)	Half-life time	Method	Evaluation	Remark
Citric acid	No data available			
phosphoric acid	No data available			

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
Citric acid	No data available			
phosphoric acid	No data available			

Abiotic degradation - other processes, if available:

Ingredient(s)	Type	Half-life time	Method	Evaluation	Remark
Citric acid		No data available			
phosphoric acid		No data available			

### Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT <sub>50</sub>	Method	Evaluation
thiourea		Oxygen depletion	0% in 34 day(s)	OECD 301C	Not readily biodegradable.
Citric acid			97 % in 28 day(s)	Method not given OECD 301B	Readily biodegradable
phosphoric acid					Not applicable (inorganic substance)
Alcohols, C10-16, ethoxylated (7-<15 EO)	Activated sludge, aerobe	Method not given	> 60 % in 28 day(s)	OECD 301B	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Ingredient(s)	Medium & Type	Analytical method	DT <sub>50</sub>	Method	Evaluation
Citric acid					No data available
phosphoric acid					No data available

Degradation in relevant environmental compartments, if available:

Ingredient(s)	Medium & Type	Analytical method	DT <sub>50</sub>	Method	Evaluation
Citric acid					No data available
phosphoric acid					No data 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	
Alcohols, C10-16, ethoxylated (7-<15 EO)	3.55	QSAR	No bioaccumulation expected	

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	
Alcohols, C10-16,	No data available				

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ethoxylated (7-<15 EO)				
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**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
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
Alcohols, C10-16, ethoxylated (7-<15 EO)	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 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 or ID 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 Maritime transport in bulk according to IMO instruments:** Non-dangerous goods**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations :**

- Regulation (EC) 1907/2006 - REACH (UK amended)
- Regulation (EC) 1272/2008 - CLP (UK amended)
- Regulation (EC) 648/2004 - Detergents regulation (UK amended)
- Delegated Regulation (EU) 2017/2100 and Regulation (EU) 2018/605 (UK amended)
- Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
- International Maritime Dangerous Goods (IMDG) Code
- Control of Poisons and Explosives Precursors Regulations 2015

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

non-ionic surfactants, anionic surfactants

&lt; 5 %

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) 648/2004 on detergents (UK amended). Data to support this assertion are held at the disposal of the competent authorities of the UK and will be made available to them, at their direct request or at the request of a detergent manufacturer.

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**Comah - 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*

**SDS code:** MS1004188

**Version:** 01.1

**Revision:** 2024-08-02

**Reason for revision:**

Overall design adjusted in accordance with Amendment 2020/878, Annex II of Regulation (EC) No 1907/2006, This data sheet contains changes from the previous version in section(s):, 2, 4, 6, 7, 9, 10, 12, 11, 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.

**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 - Organisation 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
- H290 - May be corrosive to metals.
- H302 - Harmful if swallowed.
- H318 - Causes serious eye damage.
- H319 - Causes serious eye irritation.
- H335 - May cause respiratory irritation.
- H351 - Suspected of causing cancer.
- H361 - Suspected of damaging fertility or the unborn child.
- H411 - Toxic to aquatic life with long lasting effects.
- H412 - Harmful to aquatic life with long lasting effects.

**End of Safety Data Sheet**