



## Suma Revoflow Clear A11

Revision: 2021-02-28

Version: 04.0

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

#### 1.1 Product identifier

**Trade name:** Suma Revoflow Clear A11

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

**Product use:** Dish washing rinse aid.  
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\_1\_1  
AISE\_SWED\_PW\_4\_1

UFI: QDQ5-F0K6-D00A-APD2

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

Diversey Europe Operations BV, 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@diversey.com

#### 1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible)  
For medical or environmental emergency only:  
call 0800 052 0185

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Skin Irrit. 2 (H315)  
Eye Irrit. 2 (H319)

#### 2.2 Label elements



**Signal word:** Warning.

#### Hazard statements:

H315 + H319 - Causes skin and serious eye irritation.

#### 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
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					percent
alkyl alcohol alkoxylate	[4]	111905-53-4	[4]	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Aquatic Chronic 3 (H412)	10-20
citric acid	201-069-1	77-92-9	01-2119457026-42	Eye Irrit. 2 (H319)	3-10
alkyl alcohol alkoxylate	[4]	120313-48-6	[4]	Aquatic Acute 1 (H400) Aquatic Chronic 3 (H412)	3-10
sodium cumenesulphonate	239-854-6	-	01-2119489411-37	Eye Irrit. 2 (H319)	1-3

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

[4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.

[11] Substance of Very High Concern (SVHC).

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

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

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**Inhalation:**

Get medical attention or advice if you feel unwell.

**Skin contact:**

Take off immediately all contaminated clothing and wash it before reuse.

**Eye contact:**

Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or 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:**

No known effects or symptoms in normal use.

**Skin contact:**

Causes irritation.

**Eye contact:**

Causes severe irritation.

**Ingestion:**

No known effects or symptoms in normal use.

### 4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

### 5.2 Special hazards arising from the substance or mixture

No special hazards known.

### 5.3 Advice for firefighters

As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

No special measures required.

### 6.2 Environmental precautions

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

### 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.

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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 face, hands and any exposed skin thoroughly after handling. Take off contaminated clothing. Wash contaminated clothing before reuse. 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:

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
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available
citric acid	-	-	-	-
alkyl alcohol alkoxylate	-	-	-	-
sodium cumenesulphonate	-	-	-	3.8

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)
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available
citric acid	No data available	-	No data available	-
alkyl alcohol alkoxylate	No data available	-	No data available	-
sodium cumenesulphonate	No data available	-	No data available	7.6

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)
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available
citric acid	No data available	-	No data available	-
alkyl alcohol alkoxylate	No data available	-	No data available	-
sodium cumenesulphonate	No data available	-	No data available	3.8

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
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available
citric acid	-	-	-	-
alkyl alcohol alkoxylate	-	-	-	-
sodium cumenesulphonate	-	-	-	53.6

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
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available
citric acid	-	-	-	-
alkyl alcohol alkoxylate	-	-	-	-
sodium cumenesulphonate	-	-	-	13.2

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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)
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available
citric acid	0.44	0.044	-	> 1000
alkyl alcohol alkoxylate	-	-	-	-
sodium cumenesulphonate	0.23	0.023	2.3	100

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m <sup>3</sup> )
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available
citric acid	34.6	3.46	33.1	-
alkyl alcohol alkoxylate	-	-	-	-
sodium cumenesulphonate	0.862	0.086	0.037	-

**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:

Activities covered:

**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:**

Contributing scenario, undiluted	SWED - Sector-specific worker exposure description	LCS	PROC	Duration (min)	ERC
Automatic application in a dedicated system	AISE_SWED_PW_4_2	PW	PROC 4	480	ERC8a

**Personal protective equipment****Eye / face protection:**

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

**Hand protection:**

Repeated or prolonged contact: Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.

Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material thickness: ≥ 0.7 mm

Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: ≥ 30 min Material thickness: ≥ 0.4 mm

In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.

**Body protection:**

No special requirements under normal use conditions.

**Respiratory protection:**

No special requirements under normal use conditions.

**Environmental exposure controls:** No special requirements under normal use conditions.

Recommended safety measures for handling the diluted product:

**Recommended maximum concentration (% w/w):** 0.04

**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 diluted product:**

Contributing scenario, diluted	SWED	LCS	PROC	Duration (min)	ERC
Automatic application in a dedicated closed system	AISE_SWED_PW_1_1	PW	PROC 1	480	ERC8a
Automatic application in a dedicated system	AISE_SWED_PW_4_1	PW	PROC 4	480	ERC8a

**Personal protective equipment****Eye / face protection:**

No special requirements under normal use conditions.

**Hand protection:**

No special requirements under normal use conditions.

**Body protection:**

No special requirements under normal use conditions.

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**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 , Yellow

**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)
alkyl alcohol alkoxyate	No data available		
citric acid	No data available		
alkyl alcohol alkoxyate	> 250	Method not given	
sodium cumenesulphonate	> 100	Method not given	

#### Method / remark

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

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

**Flash point (°C):** > 93 °C

**Sustained combustion:** Not applicable.

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

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

closed cup

Substance data, flammability or explosive limits, if available:

#### Method / remark

**Autoignition temperature:** Not determined

**Decomposition temperature:** Not applicable.

**pH** < 2 (neat)

**Dilution pH:** ≈ 4 (0.04 %)

**Kinematic viscosity:** Not determined

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

ISO 4316

ISO 4316

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
alkyl alcohol alkoxyate	No data available		
citric acid	1630	Method not given	
alkyl alcohol alkoxyate	Insoluble	Method not given	
sodium cumenesulphonate	Soluble		

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)
alkyl alcohol alkoxyate	No data available		
citric acid	No data available		
alkyl alcohol alkoxyate	< 10	Method not given	20
sodium cumenesulphonate	No data available		

#### Method / remark

**Relative density:** ≈ 1.04 (20 °C)

**Relative vapour density:** Not determined.

**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

Weight of evidence

### 9.2.2 Other safety characteristics

No other relevant information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

### 10.2 Chemical stability

Stable under normal storage and use conditions.

### 10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

### 10.4 Conditions to avoid

None known under normal storage and use conditions.

### 10.5 Incompatible materials

Reacts with alkali. Keep away from products containing chlorine-based bleaching agents or sulphites.

### 10.6 Hazardous decomposition products

None known under normal storage and use conditions.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Mixture data:.

#### Relevant calculated ATE(s):

ATE - Oral (mg/kg): >2000

#### Skin irritation and corrosivity

**Result:** Not corrosive to skin      **Method:** OECD 431 (EU B.40 bis), Episkin

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)
alkyl alcohol alkoxylate	LD <sub>50</sub>	≥ 1000	Rat	Method not given		18000
citric acid	LD <sub>50</sub>	3000	Rat	Method not given		Not established
alkyl alcohol alkoxylate	LD <sub>50</sub>	> 2000	Rat	Weight of evidence		Not established
sodium cumenesulphonate	LD <sub>50</sub>	> 7000	Rat	Method not given		Not established

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
alkyl alcohol alkoxylate		No data available				Not established
citric acid	LD <sub>50</sub>	> 2000	Rat	Method not given		Not established
alkyl alcohol alkoxylate		No data available		Weight of evidence		Not established
sodium cumenesulphonate	LD <sub>50</sub>	> 2000	Rabbit	Method not given		Not established

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol alkoxylate		No data available			
citric acid		No data available			
alkyl alcohol alkoxylate		No data available			

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sodium cumenesulphonate	LC <sub>50</sub>	> 770	Rat	Method not given	4
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## 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)
alkyl alcohol alkoxylate	Not established	Not established	Not established	Not established
citric acid	Not established	Not established	Not established	Not established
alkyl alcohol alkoxylate	Not established	Not established	Not established	Not established
sodium cumenesulphonate	Not established	Not established	Not established	Not established

## Irritation and corrosivity

## Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol alkoxylate	Irritant	Rabbit	OECD 404 (EU B.4)	
citric acid	Not irritant	Rabbit	OECD 404 (EU B.4)	
alkyl alcohol alkoxylate	Irritant	Rabbit	Draize test	
sodium cumenesulphonate	Mild irritant	Rabbit	OECD 404 (EU B.4)	

## Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol alkoxylate	Irritant	Rabbit	OECD 405 (EU B.5)	
citric acid	Irritant	Rabbit	OECD 405 (EU B.5)	
alkyl alcohol alkoxylate	Not corrosive or irritant	Rabbit	Method not given	
sodium cumenesulphonate	Irritant	Rabbit	OECD 405 (EU B.5)	

## Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol alkoxylate	No data available			
citric acid	No data available			
alkyl alcohol alkoxylate	No data available			
sodium cumenesulphonate	No data available			

## Sensitisation

## Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
alkyl alcohol alkoxylate	No data available			
citric acid	Not sensitising	Guinea pig	Method not given	
alkyl alcohol alkoxylate	No data available			
sodium cumenesulphonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	

## Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol alkoxylate	No data available			
citric acid	No data available			
alkyl alcohol alkoxylate	No data available			
sodium cumenesulphonate	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)
alkyl alcohol alkoxylate	No data available		No data available	
citric acid	No data available		No evidence of genotoxicity, negative test results	Method not given
alkyl alcohol alkoxylate	No data available		No data available	
sodium cumenesulphonate	No evidence for mutagenicity, negative test results	Method not given	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)

## Carcinogenicity

Ingredient(s)	Effect
alkyl alcohol alkoxylate	No data available
citric acid	No evidence for carcinogenicity, negative test results
alkyl alcohol alkoxylate	No data available
sodium cumenesulphonate	No evidence for carcinogenicity, negative test results

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## Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
alkyl alcohol alkoxylate			No data available				
citric acid			No data available				No evidence for reproductive toxicity
alkyl alcohol alkoxylate			No data available				
sodium cumenesulphonate	NOAEL	Teratogenic effects	> 3000	Rat	Non guideline test		

## 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
alkyl alcohol alkoxylate		No data available				
citric acid		No data available				
alkyl alcohol alkoxylate		No data available				
sodium cumenesulphonate	NOAEL	763 - 3534		OECD 408 (EU B.26)	90	

## Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
alkyl alcohol alkoxylate		No data available				
citric acid		No data available				
alkyl alcohol alkoxylate		No data available				
sodium cumenesulphonate	NOAEL	440	Mouse	Method not given	90	

## Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
alkyl alcohol alkoxylate		No data available				
citric acid		No data available				
alkyl alcohol alkoxylate		No data available				
sodium cumenesulphonate		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
alkyl alcohol alkoxylate			No data available					
citric acid			No data available					
alkyl alcohol alkoxylate			No data available					
sodium cumenesulphonate	Dermal	NOAEL	727	Mouse	Method not given	24 month(s)		

## STOT-single exposure

Ingredient(s)	Affected organ(s)
alkyl alcohol alkoxylate	No data available
citric acid	No data available
alkyl alcohol alkoxylate	No data available
sodium cumenesulphonate	No data available

## STOT-repeated exposure

Ingredient(s)	Affected organ(s)
alkyl alcohol alkoxylate	No data available
citric acid	No data available
alkyl alcohol alkoxylate	No data available
sodium cumenesulphonate	No data available



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**Aspiration hazard**

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

**Potential adverse health effects and symptoms**

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

**11.2 Information on other hazards****11.2.1 Endocrine disrupting properties**

Ingredient(s)	Effect
alkyl alcohol alkoxylate	No data available
citric acid	No data available
alkyl alcohol alkoxylate	No data available
sodium cumenesulphonate	No data 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)
alkyl alcohol alkoxylate	LC <sub>50</sub>	1 - 10	<i>Leuciscus idus</i>	Method not given	48
citric acid	LC <sub>50</sub>	440	<i>Leuciscus idus</i>	Method not given	48
alkyl alcohol alkoxylate	LC <sub>50</sub>	1 - 10	<i>Leuciscus idus</i>	Method not given	96
sodium cumenesulphonate	LC <sub>50</sub>	> 1000	<i>Fish</i>	EPA-OPPTS 850.1075	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol alkoxylate	EC <sub>50</sub>	1 - 10	<i>Not specified</i>	Method not given	48
citric acid	EC <sub>50</sub>	1535	<i>Daphnia magna Straus</i>	Method not given	24
alkyl alcohol alkoxylate	EC <sub>50</sub>	1	<i>Not specified</i>	Method not given	48
sodium cumenesulphonate	EC <sub>50</sub>	> 1000	<i>Daphnia</i>	EPA-OPPTS 850.1010	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol alkoxylate		No data available			
citric acid	LC <sub>50</sub>	425	<i>Scenedesmus quadricauda</i>	Method not given	168
alkyl alcohol alkoxylate	EC <sub>50</sub>	0.1 - 1	<i>Not specified</i>	Method not given	72
sodium cumenesulphonate	E <sub>r</sub> C <sub>50</sub>	310	<i>Not specified</i>		72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
alkyl alcohol alkoxylate		No data available			
citric acid		No data available			
alkyl alcohol alkoxylate		No data available			
sodium cumenesulphonate		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
alkyl alcohol alkoxylate	EC <sub>10</sub>	> 1000	<i>Activated sludge</i>	DEV-L2	
citric acid	EC <sub>50</sub>	> 10000	<i>Pseudomonas putida</i>	Method not given	16 hour(s)

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alkyl alcohol alkoxylate		1000	Activated sludge	DIN EN ISO 8192-OECD 209-88/302/EEC	
sodium cumenesulphonate	E <sub>r</sub> C <sub>50</sub>	> 1000	Bacteria	OECD 209	3 hour(s)

**Aquatic long-term toxicity**

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
alkyl alcohol alkoxylate		No data available				
citric acid		No data available				
alkyl alcohol alkoxylate		No data available				
sodium cumenesulphonate		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
alkyl alcohol alkoxylate		No data available				
citric acid		No data available				
alkyl alcohol alkoxylate	NOEC	>0.1- <1	<i>Daphnia magna</i>	Method not given	21 day(s)	
sodium cumenesulphonate		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
alkyl alcohol alkoxylate		No data available				
citric acid		No data available				
alkyl alcohol alkoxylate		No data available				
sodium cumenesulphonate		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
alkyl alcohol alkoxylate			> 60 % in 28 day(s)	OECD 301F	Readily biodegradable
citric acid			97 % in 28 day(s)	OECD 301B	Readily biodegradable
alkyl alcohol alkoxylate		CO <sub>2</sub> production	> 60% in 28 day(s)	OECD 301B	Readily biodegradable
sodium cumenesulphonate	Activated sludge,	CO <sub>2</sub> production	100 % in 28 day(s)	OECD 301B	Readily biodegradable

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	aerobe			
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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 Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
alkyl alcohol alkoxylate	No data available			
citric acid	-1.72		No bioaccumulation expected	
alkyl alcohol alkoxylate	-		No bioaccumulation expected	
sodium cumenesulphonate	-1.1	Method not given	Low potential for bioaccumulation	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
alkyl alcohol alkoxylate	No data available				
citric acid	No data available				
alkyl alcohol alkoxylate	-			No bioaccumulation expected	
sodium cumenesulphonate	No data available				

**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
alkyl alcohol alkoxylate	No data available				
citric acid	No data available				Potential for mobility in soil, soluble in water
alkyl alcohol alkoxylate	No data available				Potential for adsorption to soil
sodium cumenesulphonate	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**

Ingredient(s)	Effect
alkyl alcohol alkoxylate	No data available
citric acid	No data available
alkyl alcohol alkoxylate	No data available
sodium cumenesulphonate	No data available

**12.7 Other adverse effects**

No other adverse effects known.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

**Waste from residues / unused products:**

**European Waste Catalogue:**

The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.  
20 01 14\* - acids.

**Empty packaging**

**Recommendation:**

**Suitable cleaning agents:**

Dispose of observing national or local regulations.  
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

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

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

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulations:

- Regulation (EC) No. 1907/2006 - REACH
- Regulation (EC) No 1272/2008 - CLP
- Regulation (EC) No. 648/2004 - Detergents regulation

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

#### Ingredients according to EC Detergents Regulation 648/2004

non-ionic surfactants	5 - 15 %
anionic surfactants, polycarboxylates	< 5 %

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

**Seveso - Classification:** Not classified

### 15.2 Chemical safety assessment

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

## SECTION 16: Other information

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

**SDS code:** MSDS6007

**Version:** 04.0

**Revision:** 2021-02-28

#### Reason for revision:

This data sheet contains changes from the previous version in section(s):, 2, 6, 7, 8, 15, 16, 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:

- H302 - Harmful if swallowed.
- H315 - Causes skin irritation.
- H319 - Causes serious eye irritation.
- H400 - Very toxic to aquatic life.
- H412 - Harmful to aquatic life with long lasting effects.

#### Abbreviations and acronyms:

- AISE - The international Association for Soaps, Detergents and Maintenance Products
- DNEL - Derived No Effect Limit
- EUH - CLP Specific hazard statement
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative
- ATE - Acute Toxicity Estimate
- LD50 - Lethal Dose, 50% / Median Lethal dose
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- EC50 - effective concentration, 50%
- NOEL - No observed effect level
- NOAEL - No observed adverse effect level
- OECD - Organization for Economic Cooperation and Development

**End of Safety Data Sheet**