



## Suma Crystal A8

Revision: 2022-09-10

Version: 10.0

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

#### 1.1 Product identifier

**Trade name:** Suma Crystal A8

UFI: 5484-Q0TY-Y00H-QS92

#### 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\_8b\_2

AISE\_SWED\_PW\_1\_1

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

Diversey Europe Operations BV, Maarssenbroeksedijk 2, 3542DN Utrecht, The Netherlands

#### Contact details

Diversey 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

Eye Irrit. 2 (H319)

#### 2.2 Label elements



**Signal word:** Warning.

#### Hazard statements:

H319 - Causes serious eye irritation.

#### 2.3 Other hazards

No other hazards known.

### SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
alkyl alcohol alkoxyolate	[4]	111905-53-4	[4]	Acute Tox. 4 (H302) Skin Irrit. 2 (H315)		3-10

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				Eye Irrit. 2 (H319) Aquatic Chronic 3 (H412)	
citric acid	201-069-1	-	01-2119457026-42	STOT SE 3 (H335) Eye Irrit. 2 (H319)	3-10
sodium cumenesulphonate	239-854-6	15763-76-5	01-2119489411-37	Eye Irrit. 2 (H319)	1-3
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	[4]	120313-48-6	[4]	Skin Irrit. 2 (H315) Aquatic Acute 1 (H400) Aquatic Chronic 3 (H412)	1-3

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

<b>Inhalation:</b>	Get medical attention or advice if you feel unwell.
<b>Skin contact:</b>	Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.
<b>Eye contact:</b>	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.
<b>Ingestion:</b>	Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Get medical attention or advice if you feel unwell.
<b>Self-protection of first aider:</b>	Consider personal protective equipment as indicated in subsection 8.2.

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

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

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

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

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

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

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

No special hazards known.

### 5.3 Advice for firefighters

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

## SECTION 6: Accidental release measures

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

No special measures required.

### 6.2 Environmental precautions

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

### 6.3 Methods and material for containment and cleaning up

Dyke to collect large liquid spills. Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust). Do not place spilled materials back into the original container. Collect in closed and suitable containers for disposal.

### 6.4 Reference to other sections

For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Measures to prevent fire and explosions:

No special precautions required.

#### Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

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**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. 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:

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
alkyl alcohol alkoxyolate	No data available	No data available	No data available	No data available
citric acid	-	-	-	-
sodium cumenesulphonate	-	-	-	3.8
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	No data available	No data available	No data available	No data available

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)
alkyl alcohol alkoxyolate	No data available	No data available	No data available	No data available
citric acid	No data available	-	No data available	-
sodium cumenesulphonate	-	-	-	136.25
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	No data available	No data available	No data available	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)
alkyl alcohol alkoxyolate	No data available	No data available	No data available	No data available
citric acid	No data available	-	No data available	-
sodium cumenesulphonate	-	-	-	68.1
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	No data available	No data available	No data available	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
alkyl alcohol alkoxyolate	No data available	No data available	No data available	No data available
citric acid	-	-	-	-
sodium cumenesulphonate	-	-	-	26.9
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	No data available	No data available	No data available	No data available

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
alkyl alcohol alkoxyolate	No data available	No data available	No data available	No data available
citric acid	-	-	-	-
sodium cumenesulphonate	-	-	-	6.6
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	No data available	No data available	No data available	No data available

**Environmental exposure**

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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 alkoxyate	No data available	No data available	No data available	No data available
citric acid	0.44	0.044	-	> 1000
sodium cumenesulphonate	0.23	0.023	2.3	100
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	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> )
alkyl alcohol alkoxyate	No data available	No data available	No data available	No data available
citric acid	34.6	3.46	33.1	-
sodium cumenesulphonate	0.862	0.0862	0.037	-
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	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.

**REACH use scenarios considered for the undiluted product:**

	SWED - Sector-specific worker exposure description	LCS	PROC	Duration (min)	ERC
Automatic transfer and dilution	AISE_SWED_PW_8b_2	PW	PROC 8b	60	ERC8b

**Personal protective equipment**

**Eye / face protection:** Safety glasses are not normally required. However, their use is recommended in those cases where splashes may occur when handling the product (EN 166).  
**Hand protection:** No special requirements under normal use conditions.  
**Body protection:** No special requirements under normal use conditions.  
**Respiratory protection:** No special requirements under normal use conditions.

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

Recommended safety measures for handling the diluted product:

**Recommended maximum concentration (% w/w):** 0.05

**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:**

	SWED	LCS	PROC	Duration (min)	ERC
Automatic application in a dedicated closed system	AISE_SWED_PW_1_1	PW	PROC 1	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.  
**Respiratory protection:** No special requirements under normal use conditions.

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

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**

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

Method / remark

**Physical state:** Liquid

**Colour:** Clear , Green

**Odour:** Product specific

**Odour threshold:** Not applicable

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

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

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		
sodium cumenesulphonate	No data available		
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	> 250	Method not given	

**Method / remark**

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

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

**Flash point (°C):** > 60 °C

**Sustained combustion:** The product does not sustain combustion  
( UN Manual of Tests and Criteria, section 32, L.2 )

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

Weight of evidence  
Weight of evidence

Substance data, flammability or explosive limits, if available:

**Method / remark**

**Autoignition temperature:** Not determined

**Decomposition temperature:** Not applicable.

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

**Dilution pH:** ≈ 3 (0.05 %)

**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	
sodium cumenesulphonate	493 Soluble	Method not given	20
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	Insoluble		

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		
sodium cumenesulphonate	No data available		
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	< 10	Method not given	20

**Method / remark**

**Relative density:** ≈ 1.04 (20 °C)

**Relative vapour density:** No data available.

**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. Vapours may form explosive mixtures with air.

**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**

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

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		14000
citric acid	LD <sub>50</sub>	5400-11700	Rat	Method not given		Not established
sodium cumenesulphonate	LD <sub>50</sub>	> 7000	Rat	Method not given		Not established
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	LD <sub>50</sub>	> 2000	Rat	Method not given		100000

## 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
sodium cumenesulphonate	LD <sub>50</sub>	> 2000	Rabbit	Method not given		Not established
Alcohols, C12-15-branched and linear, ethoxylated propoxylated		No data available				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			
sodium cumenesulphonate	LC <sub>50</sub>	> 5 (mist) No mortality observed	Rat	Read across	3.87
Alcohols, C12-15-branched and linear, ethoxylated propoxylated		No data available			

## Acute inhalative toxicity, continued

Ingredient(s)	ATE - inhalation, dust (mg/l)	ATE - inhalation, mist (mg/l)	ATE - inhalation, vapour (mg/l)	ATE - inhalation, gas (mg/l)
alkyl alcohol alkoxylate	Not established	Not established	Not established	Not established
citric acid	Not established	Not established	Not established	Not established
sodium cumenesulphonate	Not established	Not established	Not established	Not established
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	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)	
sodium cumenesulphonate	Not irritant	Rabbit	OECD 404 (EU B.4)	
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	Irritant	Rabbit	Draize test	

## 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)	
sodium cumenesulphonate	Irritant	Rabbit	OECD 405 (EU B.5)	
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	Not corrosive or irritant	Rabbit	Draize test	

## Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol alkoxylate	No data available			
citric acid	No data available			
sodium cumenesulphonate	No data available			
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	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	
sodium cumenesulphonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	No data available			

## Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol alkoxylate	No data available			
citric acid	No data available			
sodium cumenesulphonate	No data available			
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	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
sodium cumenesulphonate	No evidence for mutagenicity, negative test results	Method not given	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	No data available		No data available	

## Carcinogenicity

Ingredient(s)	Effect
alkyl alcohol alkoxylate	No data available
citric acid	No evidence for carcinogenicity, negative test results
sodium cumenesulphonate	No evidence for carcinogenicity, negative test results
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	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
alkyl alcohol alkoxylate			No data available				
citric acid			No data available				No evidence for reproductive toxicity
sodium cumenesulphonate	NOAEL	Teratogenic effects	> 936	Rat	Non guideline test		No known significant effects or critical hazards
Alcohols, C12-15-branched and linear, ethoxylated			No data available				

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propoxylated							
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**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 alkoxyate		No data available				
citric acid		No data available				
sodium cumenesulphonate	NOAEL	763 - 3534	Rat	OECD 408 (EU B.26)		No effects observed
Alcohols, C12-15-branched and linear, ethoxylated propoxylated		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
alkyl alcohol alkoxyate		No data available				
citric acid		No data available				
sodium cumenesulphonate		No data available				
Alcohols, C12-15-branched and linear, ethoxylated propoxylated		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
alkyl alcohol alkoxyate		No data available				
citric acid		No data available				
sodium cumenesulphonate		No data available				
Alcohols, C12-15-branched and linear, ethoxylated propoxylated		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 alkoxyate			No data available					
citric acid			No data available					
sodium cumenesulphonate			No data available					
Alcohols, C12-15-branched and linear, ethoxylated propoxylated			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
alkyl alcohol alkoxyate	No data available
citric acid	No data available
sodium cumenesulphonate	Not applicable
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
alkyl alcohol alkoxyate	No data available
citric acid	No data available
sodium cumenesulphonate	Not applicable
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	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)
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
sodium cumenesulphonate	LC <sub>50</sub>	> 1000	<i>Fish</i>	EPA-OPPTS 850.1075	96
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	LC <sub>50</sub>	> 1-10	<i>Fish</i>	OECD 203 (EU C.1)	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
sodium cumenesulphonate	EC <sub>50</sub>	> 1000	<i>Daphnia magna Straus</i>	OECD 202 (EU C.2)	48
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	EC <sub>50</sub>	≤ 1	<i>Daphnia magna Straus</i>	OECD 202 (EU C.2)	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol alkoxylate		No data available			
citric acid	LC <sub>50</sub>	425	<i>Scenedesmus quadricauda</i>	Method not given	168
sodium cumenesulphonate	E <sub>b</sub> C <sub>50</sub>	> 230	<i>Not specified</i>	EPA OPPTS 850.5400	96
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	EC <sub>50</sub>	≤ 1	<i>Desmodesmus subspicatus</i>	OECD 201 (EU C.3)	RM000517/ RM002677 BASF EU RSDS 2021

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			
sodium cumenesulphonate		No data available			
Alcohols, C12-15-branched and linear, ethoxylated propoxylated		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)
sodium cumenesulphonate	E <sub>r</sub> C <sub>50</sub>	> 1000	<i>Bacteria</i>	OECD 209	3 hour(s)
Alcohols, C12-15-branched and linear, ethoxylated propoxylated		No data available			

**Aquatic long-term toxicity**

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
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		(mg/l)			time	
alkyl alcohol alkoxylate		No data available				
citric acid		No data available				
sodium cumenesulphonate		No data available				
Alcohols, C12-15-branched and linear, ethoxylated propoxylated		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				
sodium cumenesulphonate		No data available				
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	NOEC	> 0.1-1	<i>Daphnia magna</i>	Method not given	21 day(s)	

## Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
alkyl alcohol alkoxylate		No data available				
citric acid		No data available				
sodium cumenesulphonate		No data available				
Alcohols, C12-15-branched and linear, ethoxylated propoxylated		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				

## 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				

## Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
citric 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				

## 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				

## 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			

Abiotic degradation - hydrolysis, if available:

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

Abiotic degradation - other processes, if available:

Ingredient(s)	Type	Half-life time	Method	Evaluation	Remark
citric acid		No data 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
sodium cumenesulphonate		CO <sub>2</sub> production	103 - 109% in 28 day(s)	OECD 301B	Readily biodegradable
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	Activated sludge, aerobic	CO <sub>2</sub> production	> 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

Degradation in relevant environmental compartments, if available:

Ingredient(s)	Medium & Type	Analytical method	DT <sub>50</sub>	Method	Evaluation
citric acid					No data 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	
sodium cumenesulphonate	-1.1	Method not given	No bioaccumulation expected	
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
alkyl alcohol alkoxylate	No data available				
citric acid	No data available				
sodium cumenesulphonate	No data available				
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	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
sodium cumenesulphonate	No data available				
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	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:

## Suma Crystal A8

**12.7 Other adverse effects**

No other adverse effects known.

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

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

**European Waste Catalogue:**

20 01 29\* - detergents containing dangerous substances.

**Empty packaging****Recommendation:**

Dispose of observing national or local regulations.

**Suitable cleaning agents:**

Water, if necessary with cleaning agent.

**SECTION 14: Transport information****Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)**

**14.1 UN number:** Non-dangerous goods

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

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

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

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

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

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

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****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

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

**Ingredients according to Detergents Regulation**

non-ionic surfactants

5 - 15 %

polycarboxylates

< 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.

**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:** MSDS1977

**Version:** 10.0

**Revision:** 2022-09-10

**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):, 3, 4, 9, 11, 12, 16

**Classification procedure**

**Suma Crystal A8**

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.
- H335 - May cause respiratory 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
- 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

**End of Safety Data Sheet**