



Suma Delime EasyPack D5.7

Revision: 2022-11-28

Version: 03.0

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

1.1 Product identifier

Trade name: Suma Delime EasyPack D5.7

Product identifier: citric acid, REACH number: 01-2119457026-42, EC number: 201-069-1, CAS number: 77-92-9

UFI: E8D2-K0ME-H00Y-VPHK

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

Product use:

Descaling 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_8a_2

AISE_SWED_PW_13_2

AISE_SWED_PW_19_1

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

STOT SE 3 (H335)

Eye Irrit. 2 (H319)

2.2 Label elements



Signal word: Warning.

Hazard statements:

H319 - Causes serious eye irritation.

H335 - May cause respiratory irritation.

2.3 Other hazards

No other hazards known.

SECTION 3: Composition/information on ingredients

3.1 Substances

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Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
citric acid	201-069-1	77-92-9	01-2119457026-42	STOT SE 3 (H335) Eye Irrit. 2 (H319)		>= 75

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

ATE, if available, are listed in section 11.

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

SECTION 4: First aid measures

4.1 Description of first aid measures

General Information:

Symptoms of intoxication may even occur after several hours. It is recommended to continue medical observation for at least 48 hours after the incident. Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator.

Inhalation:

Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE, doctor or physician 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:

May cause respiratory irritation.

Skin contact:

No known effects or symptoms in normal use.

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

Ensure adequate ventilation. Do not breathe dust or vapour. Wear eye/face protection.

6.2 Environmental precautions

Do not allow to enter drainage system, surface or ground water.

6.3 Methods and material for containment and cleaning up

Ensure adequate ventilation. Collect mechanically. 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. Avoid contact with eyes. Do not breathe dust. Use only outdoors or in a well-ventilated area. 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
citric acid	-	-	-	-

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)
citric acid	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)
citric acid	No data available	-	No data available	-

DNEL/DMEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
citric acid	-	-	-	-

DNEL/DMEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
citric acid	-	-	-	-

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)
citric acid	0.44	0.044	-	> 1000

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m ³)
citric acid	34.6	3.46	33.1	-

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.

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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 transfer and dilution	AISE_SWED_PW_8a_2	PW	PROC 8a	60	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.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (% w/w): 20

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 diluted product:

	SWED	LCS	PROC	Duration (min)	ERC
Manual application by dipping, soaking, pouring	AISE_SWED_PW_13_2	PW	PROC 13	60	ERC8a
Manual application	AISE_SWED_PW_19_1	PW	PROC 19	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: Solid

Appearance: Powder

Colour: White

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
 Not applicable to solids or gases

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
citric acid	No data available		

Method / remark

Flammability (solid, gas): Not determined

Flammability (liquid): Not applicable.

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:

Autoignition temperature: Not determined
Decomposition temperature: Not applicable.
pH: Not applicable
Dilution pH: < 2 (20 %)
Kinematic viscosity: Not determined
Solubility in / Miscibility with water: Soluble

Method / remark

ISO 4316
 Not applicable to solids or gases

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
citric acid	1630	Method not given	

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

Vapour pressure: Not determined**Method / remark**

See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
citric acid	No data available		

Relative density: ≈ 1.55 (20 °C)
Relative vapour density: No data available.
Particle characteristics: Not determined.

Method / remark

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

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 determined

Not applicable to solids or gases

9.2.2 Other safety characteristics**Acid reserve:** ≈ -18.5 (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 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)
citric acid	LD ₅₀	5400-11700	Rat	Method not given		Not established

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
citric acid	LD ₅₀	> 2000	Rat	Method not given		Not established

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
citric acid		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)
citric acid	Not established	Not established	Not established	Not established

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
citric acid	Not irritant	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
citric acid	Irritant	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
citric acid	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
citric acid	Not sensitising	Guinea pig	Method not given	

Sensitisation by inhalation

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

Carcinogenicity

Ingredient(s)	Effect
citric acid	No evidence for carcinogenicity, negative test results

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
citric acid			No data available				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
citric acid		No data available				

Sub-chronic dermal toxicity

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Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
citric acid		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
citric acid		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
citric acid			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
citric acid	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
citric acid	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**

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)
citric acid	LC ₅₀	440	<i>Leuciscus idus</i>	Method not given	48

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
citric acid	EC ₅₀	1535	<i>Daphnia magna Straus</i>	Method not given	24

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
citric acid	LC ₅₀	425	<i>Scenedesmus quadricauda</i>	Method not given	168

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
citric acid		No data available			

Impact on sewage plants - toxicity to bacteria

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Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
citric acid	EC ₅₀	> 10000	<i>Pseudomonas putida</i>	Method not given	16 hour(s)

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

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

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
citric acid		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
citric acid		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:

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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 ₅₀	Method	Evaluation
citric acid			97 % in 28 day(s)	OECD 301B	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Ingredient(s)	Medium & Type	Analytical method	DT ₅₀	Method	Evaluation
citric acid					No data available

Degradation in relevant environmental compartments, if available:

Ingredient(s)	Medium & Type	Analytical method	DT ₅₀	Method	Evaluation
citric acid					No data available

12.3 Bioaccumulative potentialPartition coefficient n-octanol/water (log K_{ow})

Ingredient(s)	Value	Method	Evaluation	Remark
citric acid	-1.72		No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
citric acid	No data available				

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log K _{oc}	Desorption coefficient Log K _{oc} (des)	Method	Soil/sediment type	Evaluation
citric acid	No data available				Potential for mobility in soil, soluble in water

12.5 Results of PBT and vPvB assessment

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

12.6 Endocrine disrupting properties

Endocrine disrupting properties - Environmental effects, if available:

12.7 Other adverse effects

No other adverse effects known.

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

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

European Waste Catalogue:

20 01 29* - detergents containing dangerous substances.

Empty packaging**Recommendation:**

Dispose of observing national or local regulations.

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

Not applicable

Comah - classification: Not classified

15.2 Chemical safety assessment

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

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: MS1002276

Version: 03.0

Revision: 2022-11-28

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, 16

Full text of the H and EUH phrases mentioned in section 3:

- H290 - May be corrosive to metals.
- H319 - Causes serious eye irritation.
- H335 - May cause respiratory irritation.

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