



Suma Star Plus D1-PLUS

Revision: 2022-07-24

Version: 10.3

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

1.1 Product identifier

Trade name: Suma Star Plus D1-PLUS

UFI: PUC4-G0H2-400T-5FAU

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

Product use:	Dish wash product. 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_1
AISE_SWED_PW_10_1
AISE_SWED_PW_19_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

Acute Tox. 4 (H302)
Skin Irrit. 2 (H315)
Eye Dam. 1 (H318)
Aquatic Chronic 3 (H412)

2.2 Label elements



Signal word: Danger.

Contains Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol (MIPA-Dodecylbenzenesulfonate), Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt (MIPA Laureth Sulfate)

Hazard statements:

H302 - Harmful if swallowed.
H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements:

P280 - Wear eye or face protection.

Suma Star Plus D1-PLUS

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 - Immediately call a POISON CENTRE, doctor or physician.

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
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol	939-479-4	-	01-2119971816-24	Acute Tox. 4 (H302) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)		30-50
propane-1,2-diol	200-338-0	57-55-6	01-2119456809-23	Not classified as hazardous		10-20
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	932-185-7	1187742-72-8	01-2119976350-37	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)		10-20
alkyl polyglucoside	600-975-8	110615-47-9	01-2119489418-23	Skin Irrit. 2 (H315) Eye Dam. 1 (H318)		3-10

Specific concentration limits

Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt:

• Eye Dam. 1 (H318) >= 10% > Eye Irrit. 2 (H319) >= 5%

alkyl polyglucoside:

• Skin Irrit. 2 (H315) >= 30%

• Eye Dam. 1 (H318) >= 12% > Eye Irrit. 2 (H319) >= 1%

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.

Inhalation:

Get medical attention or advice if you feel unwell.

Skin contact:

Wash skin with plenty of lukewarm, gently flowing water. Call a POISON CENTRE, doctor or physician if you feel unwell. 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. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE, doctor or physician.

Ingestion:

Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Call a POISON CENTRE, doctor or physician. 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 or permanent damage.

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**

Wear eye/face protection. Repeated or prolonged contact: Wear suitable gloves.

6.2 Environmental precautions

Dilute with plenty of water. Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

6.3 Methods and material for containment and cleaning up

Dyke to collect large liquid spills. Absorb with liquid-binding material (sand, diatomite, universal binders, 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.

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. Avoid contact with eyes. Do not eat, drink or smoke when using this product. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging.

For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

7.3 Specific end use(s)

No specific advice for end use available.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Workplace exposure limits**

Air limit values, if available:

Ingredient(s)	UK - Long term value(s)	UK - Short term value(s)
propane-1,2-diol	150 ppm total vapour and particulates 474 mg/m ³ total vapour and particulates 10 mg/m ³ particulates	450 ppm total vapour and particulates 1422 mg/m ³ total vapour and particulates 30 mg/m ³ particulate

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
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compd. with 1-aminopropane-2-ol	-	-	-	0.49
propane-1,2-diol	-	-	-	-
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	-	-	-	15
alkyl polyglucoside	-	-	-	35.7

DNEL/DMEL dermal exposure - Worker

Ingredient(s)	Short term - Local	Short term - Systemic	Long term - Local	Long term - Systemic
---------------	--------------------	-----------------------	-------------------	----------------------

Suma Star Plus D1-PLUS

	effects	effects (mg/kg bw)	effects	effects (mg/kg bw)
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol	No data available	-	No data available	0.98
propane-1,2-diol	-	-	-	-
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available	-	0.132 mg/cm ² skin	2750
alkyl polyglucoside	No data available	-	No data available	595000

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)
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol	No data available	-	No data available	0.49
propane-1,2-diol	-	-	-	213
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available	-	0.079 mg/cm ² skin	1650
alkyl polyglucoside	No data available	-	No data available	357000

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
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol	-	-	-	3.45
propane-1,2-diol	-	-	10	168
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	-	-	-	175
alkyl polyglucoside	-	-	-	420

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
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol	-	-	-	0.85
propane-1,2-diol	-	-	10	50
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	-	-	-	52
alkyl polyglucoside	-	-	-	124

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)
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol	268	0.0268	0.268	1.37
propane-1,2-diol	260	26	183	20000
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	0.014	0.0014	0.077	10000
alkyl polyglucoside	0.176	0.018	0.0295	5000

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m ³)
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol	8.1	8.1	35	-
propane-1,2-diol	572	57.2	50	-
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	0.0617	0.00617	7.5	-
alkyl polyglucoside	1.516	0.065	0.654	-

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: If the product is diluted by using specific dosing systems with no risk of splashes or direct skin contact, the personal protection equipment as described in this section is not required.

Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

REACH use scenarios considered for the undiluted product:

	SWED - Sector-specific	LCS	PROC	Duration	ERC
--	------------------------	-----	------	----------	-----

Suma Star Plus D1-PLUS

	worker exposure description			(min)	
Manual transfer and dilution	AISE_SWED_PW_8a_1	PW	PROC 8a	60	ERC8a

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

Safety glasses or goggles (EN 166).

Hand protection:

Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary.

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 mmSuggested 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):** 0.08**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
Manual application by brushing, wiping or mopping	AISE_SWED_PW_10_1	PW	PROC 10	480	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:** Liquid**Colour:** Clear , Yellow**Odour:** Product specific**Odour threshold:** Not applicable**Melting point/freezing point (°C):** Not determined

Not relevant to classification of this product

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

See substance data

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compd. with 1-aminopropane-2-ol	No data available		
propane-1,2-diol	185-190	Method not given	1013
Alcohols, C12-14 (even numbered), ethoxylated (≤ 2.5 moles EO), sulfated, monoisopropanolamine salt	No data available		
alkyl polyglucoside	> 100	Method not given	1013

Method / remark**Flammability (solid, gas):** Not applicable to liquids**Flammability (liquid):** Not flammable.**Flash point (°C):** > 93 °C

closed cup

Sustained combustion: Not applicable.

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

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

See substance data

Suma Star Plus D1-PLUS

Substance data, flammability or explosive limits, if available:

Ingredient(s)	Lower limit (% vol)	Upper limit (% vol)
propane-1,2-diol	2.6	12.6

Method / remark

Autoignition temperature: Not determined**Decomposition temperature:** Not applicable.**pH:** ≈ 8 (neat)

ISO 4316

Kinematic viscosity: ≈ 270 mPa.s (20 °C)**Solubility in / Miscibility with water:** Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compd. with 1-aminopropane-2-ol	No data available		
propane-1,2-diol	Soluble	Method not given	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available		
alkyl polyglucoside	No data available		

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

Method / remark

Vapour pressure: Not determined

See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compd. with 1-aminopropane-2-ol	No data available		
propane-1,2-diol	18.6	Method not given	20
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available		
alkyl polyglucoside	< 0.0077	Method not given	20

Method / remark

OECD 109 (EU A.3)

Not relevant to classification of this product

Not applicable to liquids.

Relative density: ≈ 1.05 (20 °C)**Relative vapour density:** No data available.**Particle characteristics:** No data available.

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Explosive properties: Not explosive.**Oxidising properties:** Not oxidising.**Corrosion to metals:** Not corrosive

9.2.2 Other safety characteristics

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

None known under normal use conditions.

10.6 Hazardous decomposition products

None known under normal storage and use conditions.

SECTION 11: Toxicological information

Suma Star Plus D1-PLUS

11.1 Information on toxicological effects

Mixture data:.

Relevant calculated ATE(s):

ATE - Oral (mg/kg): 1500

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)
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol	LD ₅₀	No data available				1400
propane-1,2-diol	LD ₅₀	> 10000	Rat	Method not given		Not established
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available				Not established
alkyl polyglucoside	LD ₅₀	> 5000	Rat	OECD 401 (EU B.1)		Not established

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol		No data available				Not established
propane-1,2-diol	LD ₅₀	> 2000	Rabbit	Method not given		Not established
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available				Not established
alkyl polyglucoside	LD ₅₀	> 5000	Rabbit	OECD 402 (EU B.3)		Not established

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol		No data available			
propane-1,2-diol	LC ₅₀	> 317 (mist) No mortality observed	Rabbit	Non guideline test	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available			
alkyl polyglucoside		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)
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol	Not established	Not established	Not established	Not established
propane-1,2-diol	Not established	Not established	Not established	Not established
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	Not established	Not established	Not established	Not established
alkyl polyglucoside	Not established	Not established	Not established	Not established

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol	No data available			
propane-1,2-diol	Not irritant	Rabbit	OECD 404 (EU B.4)	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available			
alkyl polyglucoside	Irritant	Rabbit	OECD 404 (EU B.4)	4 hour(s)

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol	No data available			
propane-1,2-diol	Not corrosive or irritant	Rabbit	OECD 405 (EU B.5)	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available			

Suma Star Plus D1-PLUS

alkyl polyglucoside	Severe damage	Rabbit	OECD 405 (EU B.5)	
---------------------	---------------	--------	-------------------	--

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol	No data available			
propane-1,2-diol	No data available			
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available			
alkyl polyglucoside	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol	No data available			
propane-1,2-diol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available			
alkyl polyglucoside	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol	No data available			
propane-1,2-diol	No data available			
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available			
alkyl polyglucoside	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)
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol	No data available		No data available	
propane-1,2-diol	No evidence for mutagenicity, negative test results	Method not given	No data available	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available		No data available	
alkyl polyglucoside	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) OECD 473	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)

Carcinogenicity

Ingredient(s)	Effect
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol	No data available
propane-1,2-diol	No evidence for carcinogenicity, negative test results
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available
alkyl polyglucoside	No evidence for carcinogenicity, weight-of-evidence

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol			No data available				
propane-1,2-diol			No data available				No evidence for reproductive toxicity
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt			No data available				
alkyl polyglucoside	NOAEL	Developmental toxicity Maternal toxicity	1000	Rat	OECD 414 (EU B.31), oral OECD 421, oral		No evidence for reproductive toxicity

Suma Star Plus D1-PLUS

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
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol		No data available				
propane-1,2-diol		No data available				
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available				
alkyl polyglucoside	NOAEL	100	Rat	OECD 408 (EU B.26)		

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol		No data available				
propane-1,2-diol		No data available				
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available				
alkyl polyglucoside		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
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol		No data available				
propane-1,2-diol		No data available				
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available				
alkyl polyglucoside		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
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol			No data available					
propane-1,2-diol			No data available					
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt			No data available					
alkyl polyglucoside			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol	No data available
propane-1,2-diol	No data available
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available
alkyl polyglucoside	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol	No data available
propane-1,2-diol	No data available
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available
alkyl polyglucoside	No data available

Aspiration hazard

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

Suma Star Plus D1-PLUS

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)
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compd. with 1-aminopropane-2-ol	LC ₅₀	1.7	<i>Pimephales promelas</i>		48
propane-1,2-diol	LC ₅₀	> 1000	<i>Fish</i>	Method not given	24
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available			
alkyl polyglucoside	LC ₅₀	1 - 10	<i>Fish</i>	ISO 7346	

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compd. with 1-aminopropane-2-ol	LC ₅₀	2.4	<i>Daphnia magna Straus</i>	EPA-660/3-75-009	48
propane-1,2-diol	EC ₅₀	> 100	<i>Daphnia</i>	Method not given	48
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available			
alkyl polyglucoside	EC ₅₀	7	<i>Daphnia magna Straus</i>	Method not given	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compd. with 1-aminopropane-2-ol	EC ₅₀	29	<i>Pseudokirchneriella subcapitata</i>	EPA OPPTS 850.5400	96
propane-1,2-diol	EC ₅₀	24200	<i>Desmodesmus subspicatus</i>	OECD 201 (EU C.3)	72
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available			
alkyl polyglucoside	EC ₅₀	10 - 100	<i>Not specified</i>	88/302/EEC, Part C, static	

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compd. with 1-aminopropane-2-ol		No data available			
propane-1,2-diol		No data available			
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available			
alkyl polyglucoside		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compd. with 1-aminopropane-2-ol		No data available			
propane-1,2-diol	EC ₀	> 20000	<i>Pseudomonas putida</i>	Method not given	18 hour(s)
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated,		No data			

Suma Star Plus D1-PLUS

monoisopropanolamine salt		available			
alkyl polyglucoside	EC ₀	> 100	Bacteria	OECD 209	

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol		No data available				
propane-1,2-diol		No data available				
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available				
alkyl polyglucoside	NOEC	1 - 10	Not specified	OECD 204	14 day(s)	

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol		No data available				
propane-1,2-diol	NOEC	13020	<i>Ceriodaphnia dubia</i>	Method not given	7 day(s)	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available				
alkyl polyglucoside	NOEC	1 - 10	<i>Daphnia sp.</i>	OECD 202		

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
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.-, compd. with 1-aminopropane-2-ol		No data available				
propane-1,2-diol		No data available				
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available				
alkyl polyglucoside		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
alkyl polyglucoside		No data available				

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
alkyl polyglucoside		No data available				

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
alkyl polyglucoside		No data available				

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
alkyl polyglucoside		No data available				

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
alkyl polyglucoside		No data available				

Suma Star Plus D1-PLUS

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Ingredient(s)	Half-life time	Method	Evaluation	Remark
alkyl polyglucoside	No data available			

Abiotic degradation - hydrolysis, if available:

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

Abiotic degradation - other processes, if available:

Ingredient(s)	Type	Half-life time	Method	Evaluation	Remark
alkyl polyglucoside		No data available			

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT ₅₀	Method	Evaluation
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compd. with 1-aminopropane-2-ol	Activated sludge, aerobe	CO ₂ production	76% in 28 day(s)	OECD 301B	Readily biodegradable
propane-1,2-diol			> 70 % in 28 day(s)	OECD 301A	Readily biodegradable
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt			> 60 % in 28 day(s)	OECD 301B	Readily biodegradable
alkyl polyglucoside	Activated sludge, aerobe	BOD removal	88% in 28 day(s)	OECD 301D	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

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

Degradation in relevant environmental compartments, if available:

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

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log K_{ow})

Ingredient(s)	Value	Method	Evaluation	Remark
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compd. with 1-aminopropane-2-ol	No data available			
propane-1,2-diol	-1.07	Method not given	No bioaccumulation expected	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available			
alkyl polyglucoside	≤ 0.07	Method not given	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compd. with 1-aminopropane-2-ol	No data available				
propane-1,2-diol	No data available				
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available				
alkyl polyglucoside	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
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.,	No data available				

Suma Star Plus D1-PLUS

compd. with 1-aminopropane-2-ol					
propane-1,2-diol	No data available				Potential for mobility in soil, soluble in water
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available				
alkyl polyglucoside	1.7		Method not given		

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.

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

anionic surfactants
non-ionic surfactants
perfumes

5 - 15 %
< 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: MSDS3346**Version:** 10.3**Revision:** 2022-07-24**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, 6, 7, 8, 9, 11, 12, 16

Classification procedure

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

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

- H302 - Harmful if swallowed.
- H315 - Causes skin irritation.
- H318 - Causes serious eye damage.
- 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