Safety Data Sheet

According to Regulation (EC) No 1907/2006

Suma Star D1

Revision: 2019-01-06

Version: 05.3

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

1.1 Product identifier
Trade name: Suma Star D1

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses:
For professional use only.
AISE-P201 - Dishwash product. Manual process
Uses advised against: Uses other than those identified are not recommended

1.3 Details of the supplier of the safety data sheet
Diversey Europe Operations BV, Maarssenbroeksedijk 2, 3542DN Utrecht, The Netherlands

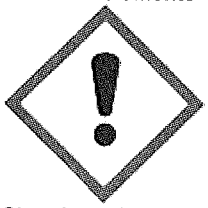
Contact details
Diversey Ltd
Weston Favell Centre, Northampton NN3 8PD, United Kingdom
Tel: 01604 405311, Fax: 01604 406809
Regulatory Email: customerservice.uk@diversey.com

1.4 Emergency telephone number
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. The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
sodium alkylbenzenesulphonate	290-656-6	90194-45-9	[1]	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)		10-20
sodium alkylethersulphate	[4]	68585-34-2	[4]	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)		3-10
bronopol (INN)	200-143-0	52-51-7	-	Acute Tox. 4 (H302) Acute Tox. 4 (H312) STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)		0.01-0.1

				Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)		

Workplace exposure limit(s), if available, are listed in subsection 8.1.
[1] Exempted: ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required.
[2] Exempted: included in Annex IV of Regulation (EC) No 1907/2006.
[3] Exempted: Annex V of Regulation (EC) No 1907/2006.
[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

Inhalation: Get medical attention or advice if you feel unwell.

Skin contact: Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.

Eye contact: Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. 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: No known effects or symptoms in normal use.

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

No special measures required.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust).

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 adviced by Diversey. Wash hands before breaks and at the end of workday. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging.
For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

7.3 Specific end use(s)

No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limits

Air limit values, if available:

Biological limit values, if available:

Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

DNEL/DMEL and PNEC values

Human exposure

DNEL oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium alkylethersulphate	-	-	-	15
bronopol (INN)	-	1.1	-	0.35

DNEL dermal exposure - Worker

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium alkylethersulphate	-	-	-	2750
bronopol (INN)	0.013 mg/cm² skin	7	0.013 mg/cm² skin	2.3

DNEL dermal exposure - Consumer

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium alkylethersulphate	-	1650	-	-
bronopol (INN)	0.008 mg/cm² skin	4.2	0.008 mg/cm² skin	1.4

DNEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium alkylethersulphate	-	-	-	175
bronopol (INN)	4.2	12.3	4.2	4.1

DNEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium alkylethersulphate	-	-	-	52
bronopol (INN)	1.3	3.7	1.3	1.2

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)
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium alkylethersulphate	0.24	0.024	-	10000
bronopol (INN)	0.01	0.0008	0.0025	0.43

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium alkylethersulphate	0.0917	0.092	7.5	-
bronopol (INN)	0.041	0.00328	0.5	-

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:
Covering activities such as filling and transfer of product to application equipment, flasks or buckets

Appropriate engineering controls: No special requirements under normal use conditions.
Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

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 (%): 0.2

Appropriate engineering controls: No special requirements under normal use conditions.
Appropriate organisational controls: No special requirements under normal use conditions.

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: Slightly perfumed
Odour threshold: Not applicable
pH: ≈ 6 (neat) — ISO 4316
Dilution pH: ≈ 7 — ISO 4316
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)
sodium alkylbenzenesulphonate	No data available		
sodium alkylethersulphate	> 100	Method not given	
bronopol (INN)	No data available		

Method / remark

Flammability (liquid): Not flammable.
Flash point (°C): ≈ 100 — closed cup
Sustained combustion: No
(UN Manual of Tests and Criteria, section 32, L.2)
Evaporation rate: Not relevant for classification of this product. — Not relevant to classification of this product
Flammability (solid, gas): Not applicable to liquids
Upper/lower flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available:

Method / remark

Vapour pressure: Not determined — See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)

sodium alkylbenzenesulphonate	No data available		
sodium alkylethersulphate	2300		20
bronopol (INN)	0.0051	OECD 104 (EU A.4)	20

Vapour density: Not determined
Relative density: ≈ 1.03 (20 °C)
Solubility in / Miscibility with Water: Fully miscible

Method / remark
Not relevant to classification of this product
OECD 109 (EU A.3)

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
sodium alkylbenzenesulphonate	No data available		
sodium alkylethersulphate	Soluble		20
bronopol (INN)	280	Method not given	23

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

Method / remark

Autoignition temperature: Not determined
Decomposition temperature: Not applicable.
Viscosity: ≈ 300 mPa.s (20 °C)
Explosive properties: Not explosive.
Oxidising properties: Not oxidising.

DM-006 Viscosity - Standard

9.2 Other information
Surface tension (N/m): Not determined
Corrosion to metals: Not corrosive

Not relevant to classification of this product
Weight of evidence

Substance data, dissociation constant, if available:

Ingredient(s)	Value	Method	Temperature (°C)
bronopol (INN)	9.56 (pKa)	Method not given	21

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

11.1 Information on toxicological effects

Mixture data:.

Relevant calculated ATE(s):
ATE - Oral (mg/kg): >2000

Skin irritation and corrosivity
Result: Not corrosive or irritant **Species:** Not applicable **Method:** Weight of evidence
Eye irritation and corrosivity
Result: Eye irritant 2 **Method:** Weight of evidence

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

Acute toxicity
Acute oral toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure

		(mg/kg)			time (h)
sodium alkylbenzenesulphonate	LD_{50}	> 1470	Rat	OECD 401 (EU B.1)	
sodium alkylethersulphate	LD_{50}	> 2000	Rat	OECD 401 (EU B.1)	
bronopol (INN)	LD_{50}	305	Rat	OECD 401 (EU B.1)	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
sodium alkylbenzenesulphonate		No data available			
sodium alkylethersulphate	LD_{50}	> 2000	Rat	OECD 402 (EU B.3)	
bronopol (INN)	LD_{50}	> 2000	Rat	OECD 402 (EU B.3)	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium alkylbenzenesulphonate		No data available			
sodium alkylethersulphate		No data available			
bronopol (INN)	LC_{50}	≥ 0.588 (dust)	Rat	Method not given	4

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium alkylbenzenesulphonate	No data available			
sodium alkylethersulphate	Irritant	Rabbit	OECD 404 (EU B.4)	
bronopol (INN)	Irritant	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium alkylbenzenesulphonate	No data available			
sodium alkylethersulphate	Severe damage	Rabbit	OECD 405 (EU B.5)	
bronopol (INN)	Severe damage	Rabbit	Method not given	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium alkylbenzenesulphonate	No data available			
sodium alkylethersulphate	No data available			
bronopol (INN)	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium alkylbenzenesulphonate	No data available			
sodium alkylethersulphate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT Read across	
bronopol (INN)	Not sensitising	Guinea pig	OECD 406 (EU B.6)	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium alkylbenzenesulphonate	No data available			
sodium alkylethersulphate	No data available			
bronopol (INN)	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)
sodium alkylbenzenesulphonate	No data available		No data available	
sodium alkylethersulphate	No evidence for mutagenicity, negative test results	OECD 476 (Chinese Hamster Ovary)	No evidence for mutagenicity, negative test results	
bronopol (INN)	No evidence for mutagenicity, negative test results	Method not given	No data available	

Carcinogenicity

Ingredient(s)	Effect
sodium alkylbenzenesulphonate	No data available
sodium alkylethersulphate	No evidence for carcinogenicity, negative test results
bronopol (INN)	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
sodium alkylbenzenesulphonate			No data available				
sodium alkylethersulphate	NOAEL	Developmental toxicity	86.6	Rat	OECD 416, (EU B.35), oral		No known significant effects or critical hazards
bronopol (INN)			No data available				No adverse effects observed

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
sodium alkylbenzenesulphonate		No data available				
sodium alkylethersulphate	NOAEL	50		Method not given		
bronopol (INN)		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
sodium alkylbenzenesulphonate		No data available				
sodium alkylethersulphate	NOEL	> 12.5		Method not given		
bronopol (INN)		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
sodium alkylbenzenesulphonate		No data available				
sodium alkylethersulphate		No data available				
bronopol (INN)		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
sodium alkylbenzenesulphonate			No data available					
sodium alkylethersulphate			No data available					
bronopol (INN)			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium alkylbenzenesulphonate	No data available
sodium alkylethersulphate	No data available
bronopol (INN)	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sodium alkylbenzenesulphonate	No data available
sodium alkylethersulphate	No data available
bronopol (INN)	Respiratory tract

Aspiration hazard

Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

Potential adverse health effects and symptoms

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

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)
sodium alkylbenzenesulphonate		No data available			
sodium alkylethersulphate	LC_{50}	1 - 10	*Brachydanio rerio*	OECD 203, semi-static	96
bronopol (INN)	LC_{50}	37.5	*Lepomis macrochirus*	OPP 72-1, static (EPA)	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium alkylbenzenesulphonate		No data available			
sodium alkylethersulphate	EC_{50}	1 - 10	*Daphnia*	OECD 202, static	48
bronopol (INN)	EC_{50}	1.4	*Daphnia magna Straus*	OECD 202 (EU C.2)	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium alkylbenzenesulphonate		No data available			
sodium alkylethersulphate	EC_{50}	7.5	*Not specified*	DIN 38412, Part 9	72
bronopol (INN)	EC_{50}	0.37	*Pseudokirchneriella subcapitata*	OECD 201 (EU C.3)	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
sodium alkylbenzenesulphonate		No data available			
sodium alkylethersulphate		No data available			-
bronopol (INN)		No data available			-

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
sodium alkylbenzenesulphonate		No data available			
sodium alkylethersulphate	EC_{10}	300 - 500		Method not given	0.5 hour(s)
bronopol (INN)	EC_{20}	2	*Activated sludge*	OECD 209	150 minute(s)

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium alkylbenzenesulphonate		No data available				
sodium alkylethersulphate	NOEC	0.1 - 0.13	*Not specified*	Method not given	365 day(s)	
bronopol (INN)	EC_{50}	21.5	*Oncorhynchus mykiss*	OECD 210	49 day(s)	

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium alkylbenzenesulphonate		No data available				
sodium alkylethersulphate	NOEC	0.18 - 0.72	*Daphnia sp.*	Method not given	21 day(s)	
bronopol (INN)	NOEC	0.27	*Daphnia magna*	OECD 211, flow-through	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
sodium alkylbenzenesulphonate		No data available				

sodium alkylethersulphate	NOEC	0.72 - 0.9		Method not given	3	
bronopol (INN)		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
sodium alkylethersulphate		No data available			-	
bronopol (INN)	LD_{50}	> 500	*Eisenia fetida*	OECD 207	14	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium alkylethersulphate		No data available			-	
bronopol (INN)		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
sodium alkylethersulphate		No data available			-	
bronopol (INN)		No data available			-	

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium alkylethersulphate		No data available			-	
bronopol (INN)		No data available			-	

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium alkylethersulphate		No data available			-	
bronopol (INN)		No data available			-	

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
bronopol (INN)	No data available	OECD 111	Rapidly hydrolysible	

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT_{50}	Method	Evaluation
sodium alkylbenzenesulphonate				OECD 301B	Readily biodegradable
sodium alkylethersulphate			> 60 % in 28 day(s)	Method not given	Readily biodegradable
bronopol (INN)	Activated sludge, aerobe		70-80%	OECD 301B	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
sodium alkylbenzenesulphonate	No data available			
sodium alkylethersulphate	0.95 - 3.9	Method not given	Low potential for bioaccumulation	

bronopol (INN)	0.18	Method not given	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium alkylbenzenesulphonate	No data available				
sodium alkylethersulphate	No data available				
bronopol (INN)	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
sodium alkylbenzenesulphonate	No data available				
sodium alkylethersulphate	No data available				
bronopol (INN)	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 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

EU regulations:

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

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

UFI: WNC4-G048-H00T-US5Q

Ingredients according to EC Detergents Regulation 648/2004

anionic surfactants 15 - 30 %

perfumes, 2-Bromo-2-Nitropropane-1,3-Diol

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

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: MSDS3344 **Version:** 05.3 **Revision:** 2019-01-06

Reason for revision:
This data sheet contains changes from the previous version in section(s):, 1, 8, 15, 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.
- H312 - Harmful in contact with skin.
- H315 - Causes skin irritation.
- H318 - Causes serious eye damage.
- H335 - May cause respiratory irritation.
- H400 - Very toxic to aquatic life.
- H411 - Toxic to aquatic life with long lasting effects.
- H412 - Harmful to aquatic life with long lasting effects.

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

End of Safety Data Sheet