SAFETY DATA SHEET

This Safety Data Sheet (SDS) was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 (in particular as amended by Commission Regulation (EU) 2020/878 with respect to SDSs) and Regulation (EC) No. 1272/2008 (CLP)

Issuing Date: 13-Nov-2023 **Revision date** 13-Nov-2023 **Revision Number** 1

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

1.1. Product identifier

Product Identifier	C-21009669-002_PGP_CLPR7_EUR_SAW
Product Name	Ariel Professional Stain Buster POD Washing Capsules
Product Form	Mixture
Pure substance/mixture	Mixture

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

Recommended use	Restricted to professional users
Uses advised against	No information available
Main user category	SU 22 - Professional uses
Product category	Laundry Unit Dose
Use category	PC35 - Washing and cleaning products (including solvent based products)

1.3. Details of the supplier of the safety data sheet

Supplier	**Manufacturer**
Procter & Gamble UK Brooklands PGP, Weybridge, Surrey, KT13 0XP, UK Tel: 01932 896000 Fax: 01932 896200 P&G DCE bvba/sprl-Belgium Dist. Div., Temselaan 100, B-1853 Strombeek-Bever, Belgium (IE) 1800 535 119	P&G Amiens, Zone Industrielle, Rue Andre, Durouchez, BP 1336, 80013, Amiens, France Tel: 33-3-22-543200 Fax: 33-3-22-435466

For further information, please contact

E-mail address customerservice@pgprof.com

1.4. Emergency telephone number

Emergency Telephone (UK) Emergency Tel: 0800 328 8304 (IRL) Emergency Tel: 1800 509 497

(IRL) Poisons information: for information or to report a poisoning incident contact The National Poisons Information Centre 01 8092166 (8.00 a.m. to 10.00 p.m. 7 days a week)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 1 - (H318)
Chronic aquatic toxicity	Category 3 - (H412)

2.2. Label elements

Signal word
Danger

Hazard statements
H315 - Causes skin irritation
H318 - Causes serious eye damage
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)
P102 - Keep out of reach of children
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P310 - Immediately call a POISON CENTER or doctor/physician
P305 + P351 - IF IN EYES: Rinse cautiously with water for several minutes
P302 + P352 - IF ON SKIN: Wash with plenty of water
P501 - Dispose of contents/container to an appropriate local waste system

EUH208 - Contains Methylundecanal, Tetrahydrolinalool, Tetramethyl Acetyloctahydronaphthalenes, Citronellol, Delta-Damascone, Isoeugenol, Protease May produce an allergic reaction.

2.3. Other hazards

No information available

Endocrine Disruptor Information There are no substances contained at or above the regulated value for declaration of >0.1% that fall under the definition of confirmed endocrine disruptors of any EU regulation.

SECTION 3: Composition/information on ingredients

3.1 Substances
Not applicable

3.2 Mixtures

Chemical name	CAS No.	Weight-%	REACH registration number	EC No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
MEA-C10-13 Alkyl Benzenesulfonate	85480-55-3	>30	01-2119905842-39	287-335-8	Acute Tox. 4 (Oral) (H302) Aquatic Chronic 3 (H412) Eye Dam. 1 (H318) Skin Irrit. 2 (H315)	-	-	-
Mea-Laureth Sulfate	68184-04-3	10 - 20	No data available	-	Aquatic Chronic 3 (H412) Eye Dam. 1 (H318) Skin Irrit. 2 (H315)	-	-	-

C12-14 Pareth-n	68439-50-9	1 - 5	No data available	Polymer	Acute Tox. 4 (Oral) (H302) Aquatic Chronic 3 (H412) Eye Dam. 1 (H318)	-	-	-
C12-16 Pareth-n	68551-12-2	0 - 1	No data available	500-221-7	Aquatic Acute 1 (H400) Aquatic Chronic 3 (H412) Eye Irrit. 2 (H319)	-	-	-
Methylundecanal	110-41-8	0 - 1	01-2119969443-29	203-765-0	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Skin Irrit. 2 (H315) Skin Sens. 1B (H317)	-	-	-
Tetrahydrolinalool	78-69-3	0 - 1	01-2119454788-21	201-133-9	Eye Irrit. 2 (H319) Skin Irrit. 2 (H315) Skin Sens. 1B (H317)	-	-	-
Tetramethyl Acetyloctahydronaphthalenes	54464-57-2	0 - 1	01-2119489989-04	259-174-3 259-175-9 268-978-3 268-979-9 915-730-3	Aquatic Chronic 2 (H411) Skin Irrit. 2 (H315) Skin Sens. 1B (H317)	-	-	-
Citronellol	106-22-9	0 - 1	01-2119453995-23	203-375-0	Eye Irrit. 2 (H319) Skin Irrit. 2 (H315) Skin Sens. 1B (H317)	-	-	-
Protease	9014-01-1	0 - 1	01-2119480434-38	232-752-2	Acute Tox. 4 (Oral) (H302) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411) Eye Dam. 1 (H318) Resp. Sens. 1 (H334) Skin Irrit. 2 (H315) STOT SE 3 (H335)	-	-	-
Delta-Damascone	57378-68-4	0 - 1	01-2119535122-53	260-709-8 275-156-8	Acute Tox. 4 (Oral) (H302) Aquatic Acute 1 (H400) Aquatic Chronic 1	-	-	-

					(H410) Skin Irrit. 2 (H315) Skin Sens. 1A (H317)			
Isoeugenol	97-54-1	0 - 1	01-2120223682-61	202-590-7 227-678-2	Acute Tox. 4 (Dermal) (H312) Acute Tox. 4 (Inhalation:dust,mist) (H332) Acute Tox. 4 (Oral) (H302) Eye Irrit. 2 (H319) Skin Irrit. 2 (H315) Skin Sens. 1A (H317) STOT SE 3 (H335)	Skin Sens. 1A :: 0.01%<=C<100%	-	-

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate
No information available

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59).

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Inhalation IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. (Call a physician if symptoms occur).

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Skin contact IF ON SKIN: Wash with plenty of soap and water. Get medical attention if symptoms occur. Take off contaminated clothing and wash before reuse. Discontinue use of product.

Ingestion IF SWALLOWED:. Rinse mouth. Do NOT induce vomiting. Call a physician or poison control center immediately.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

Symptoms Coughing and/ or wheezing. Redness. Swelling of tissue. Itching. Sneezing. Dryness. Pain. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Excessive secretion. Blurred vision.

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

Note to physicians Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Dry chemical. Alcohol resistant foam. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical None in particular.

5.3. Advice for firefighters

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Scoop absorbed substance into closing containers.

Methods for cleaning up Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Small quantities of liquid spill:. Large Spills:. contain released substance, pump into suitable containers. This material and its container must be disposed of in a safe way, and as per local legislation.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Avoid contact with skin. Avoid contact with eyes. Use personal protection equipment. Do not eat, drink or smoke when using this product.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep/store only in original container. Keep tightly closed in a dry and cool place.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Protease	-	-	-	-	TWA: 0.00004 mg/m³ * Respiratory Sensitisation
Chemical name	**Cyprus**	**Czech Republic**	**Denmark**	**Estonia**	**Finland**
Protease	-	-	Ceiling: 0.00006 mg/m³	TWA: 1 glycine unit/m³ STEL: 3 glycine unit/m³	-

Chemical name	France	Germany	Germany DFG	Greece	Hungary
Protease	-	-	respiratory sensitizer	-	-
Isoeugenol	-	-	skin sensitizer	-	-
Chemical name	Ireland	Italy	Italy REL	Latvia	Lithuania
Protease	TWA: 0.00006 mg/m³ STEL: 0.00006 mg/m³ Sensitizer	-	Ceiling: 0.00006 mg/m³	-	-
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Protease	Ceiling: 0.00006 mg/m³	-	-	-	STEL: 0.00006 mg/m³ sensitizer
Chemical name	Sweden	Switzerland	United Kingdom	Israel - Occupational Exposure Limits - TWAs	Turkey
Protease	NGV: 1 glycine unit/m³ Bindande KGV: 3 glycine unit/m³ Sensitizer	STEL: 0.00006 mg/m³	TWA: 0.00004 mg/m³ STEL: 0.00012 mg/m³ Sen+	-	-

Biological occupational exposure limits
This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) Long term.

Chemical name	Worker - dermal, long-term - systemic	Worker - inhalative, long-term - systemic	Worker - dermal, long-term - local	Worker - inhalative, long-term - local
MEA-C10-13 Alkyl Benzenesulfonate	119 mg/kg bw/day	6.71 mg/m³	-	12 mg/m³
Methylundecanal	10.46 mg/kg bw/day	36.89 mg/m³	35.7 mg/cm2	92.21 mg/m³
Tetrahydrolinalool	3.16 mg/kg bw/day	11.14 mg/m³	0.19 mg/cm2	-
Tetramethyl Acetyloctahydronaphthalenes	28.7 mg/kg bw/day	30 mg/m³	0.648 mg/cm2	-
Citronellol	327.4 mg/kg bw/day	161.6 mg/m³	-	10 mg/m³
Protease	-	-	-	0 mg/m³
Delta-Damascone	0.4 mg/kg bw/day	1.5 mg/m³	0.014 mg/cm2	-

Chemical name	Consumer - oral, long-term - local	Consumer - inhalative, long-term - local	Consumer - dermal, long-term - local
MEA-C10-13 Alkyl Benzenesulfonate	-	3 mg/m³	-
Methylundecanal	-	22.74 mg/m³	17.86 mg/cm2
Tetrahydrolinalool	-	-	0.19 mg/cm2
Tetramethyl Acetyloctahydronaphthalenes	-	-	0.38 mg/cm2
Citronellol	-	10 mg/m³	-
Protease	-	0 mg/m³	-

Chemical name	Consumer - oral, long-term - systemic	Consumer - inhalative, long-term - systemic	Consumer - dermal, long-term - systemic
MEA-C10-13 Alkyl Benzenesulfonate	0.425 mg/kg bw	1.18 mg/m³	42.5 mg/kg bw/day
Methylundecanal	5.23 mg/kg bw	9.1 mg/m³	5.23 mg/kg bw/day
Tetrahydrolinalool	1.58 mg/kg bw	2.75 mg/m³	1.58 mg/kg bw/day
Tetramethyl Acetyloctahydronaphthalenes	3 mg/kg bw	9 mg/m³	17.2 mg/kg bw/day
Citronellol	13.8 mg/kg bw	47.8 mg/m³	196.4 mg/kg bw/day
Protease	2.86 mg/kg bw	-	-
Delta-Damascone	0.25 mg/kg bw	0.43 mg/m³	0.25 mg/kg bw/day

Derived No Effect Level (DNEL) Short term.

Chemical name	Worker - dermal, short-term - systemic	Worker - inhalative, short-term - systemic	Worker - dermal, short-term - local	Worker - inhalative, short-term - local
Methylundecanal	100 mg/kg bw/day	352.63 mg/m³	71.43 mg/cm2	881.58 mg/m³
Tetrahydrolinalool	-	-	2.760 mg/cm²	-
Citronellol	-	-	2.95 mg/cm2	10 mg/m³
Delta-Damascone	-	-	0.014 mg/cm²	-

Chemical name	Consumer - inhalative, short-term - local	Consumer - dermal, short-term - local
Methylundecanal	217.39 mg/m³	35.71 mg/cm2
Tetrahydrolinalool	-	2.760 mg/cm²
Citronellol	10 mg/m³	2.95 mg/cm2
Delta-Damascone	-	0.009 mg/cm2

Chemical name	Consumer - oral, short-term - systemic	Consumer - inhalative, short-term - systemic	Consumer - dermal, short-term - systemic
Methylundecanal	25 mg/kg bw	86.96 mg/m³	50 mg/kg bw/day
Protease	17.28 mg/kg bw	-	-

Predicted No Effect Concentration (PNEC)

Chemical name	Fresh Water	Marine water	Intermittent release
MEA-C10-13 Alkyl Benzenesulfonate	0.268 mg/L	0.027 mg/L	0.022 mg/L
Methylundecanal	0.66 mg/L	0 mg/L	0.002 mg/L
Tetrahydrolinalool	0.009 mg/L	0.001 mg/L	0.089 mg/L
Tetramethyl Acetyloctahydronaphthalenes	0.004 mg/L	0 mg/L	-
Citronellol	0.002 mg/L	0 mg/L	0.024 mg/L
Protease	0.002 mg/L	0 mg/L	0.001 mg/L
Delta-Damascone	0.007 mg/L	0.001 mg/L	0.004 mg/L

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment plant	Soil	Air	Oral
MEA-C10-13 Alkyl Benzenesulfonate	8.1 mg/kg dwt	0.81 mg/kg dwt	3.43 mg/L	35 mg/kg dwt	-	-
Methylundecanal	0.265 mg/kg dwt	0.027 mg/kg dwt	10 mg/L	0.053 mg/kg dwt	-	-
Tetrahydrolinalool	0.082 mg/kg dwt	0.008 mg/kg dwt	450 mg/L	0.011 mg/kg dwt	-	-
Tetramethyl Acetyloctahydronaphthalenes	3.73 mg/kg dwt	0.75 mg/kg dwt	10 mg/L	2.7 mg/kg dwt	-	-
Citronellol	0.026 mg/kg dwt	0.003 mg/kg dwt	580 mg/L	0.004 mg/kg dwt	-	-
Protease	-	-	65 mg/L	0.568 mg/kg dwt	-	-
Delta-Damascone	0.906 mg/kg dwt	0.091 mg/kg dwt	2.41 mg/L	0.177 mg/kg dwt	-	-

8.2. Exposure controls

Personal Protective Equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Protective gloves.

Skin and body protection No special protective equipment required.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do

not eat, drink or smoke when using this product.

Environmental exposure controls Prevent that the undiluted product reaches surface waters.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Liquid
Color	Coloured
Odor	Pleasant (perfume)
Odor threshold	Not applicable

Property	**Values**	**Remarks • Method**
Melting point / freezing point	No data available	Not available. This property is not relevant for the safety and classification of this product
Initial boiling point and boiling range	> 90 °C	
Flammability		Not applicable. This property is not relevant for liquid product forms
Flammability Limit in Air		Not available. This property is not relevant for the safety and classification of this product
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	No Flash to Boiling (NFTB)	
Autoignition temperature	No data available	Not available. This property is not relevant for the safety and classification of this product
Decomposition temperature	No Data Available	Not available. This property is not relevant for the safety and classification of this product
pH	7 - 8	
Dynamic viscosity	No Data Available	Not available. This property is not relevant for the safety and classification of this product
Water solubility	Soluble in water	
Solubility(ies)	No Data Available	Not available. This property is not relevant for the safety and classification of this product
Partition coefficient	No Data Available	Not available. This property is not relevant for the safety and classification of this product
Vapor pressure	No Data Available	Not available. This property is not relevant for the safety and classification of this product
Relative density	1	
Relative vapor density	No data available	Not available. This property is not relevant for the safety and classification of this product
Particle characteristics		Not available. This property is not relevant for the safety and classification of this product
Particle Size	No information available	
Particle Size Distribution	No information available	

9.2. Other information

9.2.1. Information with regard to physical hazard classes
No information available

9.2.2. Other safety characteristics
No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye damage. May cause irreversible damage to eyes.

Skin contact Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).

Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. Burning. May cause blindness. May cause redness and tearing of the eyes.

Numerical measures of toxicity

No information available

Acute toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
MEA-C10-13 Alkyl Benzenesulfonate	1089 mg/kg (RAT)	5001 mg/kg (RABBIT)	-
C12-14 Pareth-n	>300-2000 mg/kg bw (Rat)	> 5000 mg/kg bw	-
Methylundecanal	5001 mg/kg (RAT)	8281 mg/kg (RABBIT)	-
Tetrahydrolinalool	8270 mg/kg bw	> 5000 mg/kg bw	> 0.885 mg/L air
Tetramethyl Acetyloctahydronaphthalenes	//	5001 mg/kg (RAT)	//
Citronellol	3450 mg/kg bodyweight (rat)	2650 mg/kg bodyweight (rabbit)	-

Protease	1800 mg/kg (RAT)	-	-
Delta-Damascone	1400 mg/kg (RAT)	5001 mg/kg (RABBIT)	-
Isoeugenol	= 1560 mg/kg (Rat)	1900 mg/kg (RAT)	-

Chemical name	Carcinogenicity	Species	Eye Damage	Species	Developmental toxicity	Species	Mutagenicity	Species
MEA-C10-13 Alkyl Benzenesulfonate	-	-	OECD 405	-	-	-	-	-
C12-14 Pareth-n	-	-	OECD 405	-	-	-	-	-
Tetrahydrolinalool	-	-	Y	-	-	-	-	-
Citronellol	-	-	Y (OECD 405)	-	-	-	-	-
Protease	-	-	Y (OECD 405)	-	-	-	-	-

Chemical name	Reproductive toxicity	Species	Skin corrosion/irritation	Species	Sensitization	Species
MEA-C10-13 Alkyl Benzenesulfonate	-	-	Y (100%; OECD 404)	-	-	-
Tetrahydrolinalool	-	-	Y	-	-	-
Methylundecanal	-	-	Y	-	-	-
Tetramethyl Acetyloctahydronaphthalenes	-	-	OECD 439	-	-	-
Citronellol	-	-	Y (OECD 404)	-	-	-
Protease	-	-	Y (OECD 404)	-	Y	-
Delta-Damascone	-	-	Y (EU Method B.46)	-	-	-

Chemical name	Skin sensitization	Species	STOT - single exposure	Target Organs	Species	STOT - repeated exposure	Target Organs	Species	Aspiration hazard
Tetrahydrolinalool	Y (OECD 429)	-	-	-	-	-	-	-	-
Methylundecanal	Y (OECD 429)	-	-	-	-	-	-	-	-
Tetramethyl Acetyloctahydronaphthalenes	OECD 429	-	-	-	-	-	-	-	-
Citronellol	Y (OECD 429)	-	-	-	-	-	-	-	-
Protease	-	-	(Y)	-	-	-	-	-	-
Delta-Damascone	Y (OECD 429)	-	-	-	-	-	-	-	-
Isoeugenol	-	-	-	-	-	-	nasal cavity	-	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Irritating to skin.

Serious eye damage/eye irritation Risk of serious damage to eyes.

Respiratory or skin sensitization Not applicable.

Germ cell mutagenicity None known.

Carcinogenicity None known.

Reproductive toxicity None known.

STOT - single exposure None known.

STOT - repeated exposure None known.

Aspiration hazard Not applicable.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties There are no substances contained at or above the regulated value for declaration of >0.1% that fall under the definition of confirmed endocrine disruptors of any EU regulation.

11.2.2. Other information

Other adverse effects None known.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
MEA-C10-13 Alkyl Benzenesulfonate	10.9 mg/L (OECD 201; Microcystis aeruginosa; 96 h)	2.22 mg/L (OECD 203; Danio rerio; 96 h)	-	7.01 mg/L (Daphnia magna; 48 h)
C12-14 Pareth-n	>1-10 mg/L (OECD 201; Desmodesmus subspicatus (green algae); static test)	1.2 mg/L (OECD 203; Danio rerio; 96 h)	3 mg/L (Pseudomonas putida; 5 h)	> 1 - 10 mg/L (OECD 202; Daphnia magna; static test)
Methylundecanal	0.18 mg/L (OECD 201; Pseudokirchneriella subcapitata; 72 h)	0.35 mg/L (OECD 203; Oncorhynchus mykiss; 96 h)	-	0.21 mg/L (OECD 202; Daphnia magna; 48 h)
Tetrahydrolinalool	21.6 mg/L (Desmodesmus subspicatus; 72 h)	8.9 mg/L (OECD 203; Danio rerio; 96 h)	(EC50: 1000 mg/L (Pseudomonas putida; 0.5 h))	14.2 mg/L (OECD 202; Daphnia magna; 48 h)
Tetramethyl Acetyloctahydronaphthalenes	2.7 mg/L (OECD 201; Desmodesmus subspicatus; 72 h)	1.3 mg/L (OECD 203; Lepomis macrochirus; 96 h)	-	1.38 mg/L (OECD 202; Daphnia magna; 48 h)
Citronellol	2.4 mg/L (72 h)	14.66 mg/L (German standard DIN 38 412, part L15.; Leuciscus idus; 96 h)	10000 mg/L (German standard, DIN 38412 Part 27; Pseudomonas putida; 0.5 h)	17.48 mg/L (EU Directive 79/831/EEC, Annex V, part C.; Daphnia magna; 48 h)
Protease	1.58 mg/L (OECD 201; Raphidocelis subcapitata; 72 h)	15.6 mg/L (OECD 203; Oncorhynchus mykiss; 96 h)	-	0.327 mg/L (OECD 202; Daphnia magna; 48 h)

Delta-Damascone	4.54 mg/L (OECD 201; Pseudokirchneriella subcapitata; 72 h)	0.97 mg/L (OECD 203; Oryzias latipes; 96 h)	241 mg/L (OECD 209; activated sludge; 3 h)	1.18 mg/L (OECD 211; Daphnia magna; 21 d)

Chronic Toxicity

Chemical name	Toxicity to algae (NOEC or ECx)*	Toxicity to fish (NOEC or ECx)*	Toxicity to daphnia and other aquatic invertebrates (NOEC or ECx)*	Toxicity to Microorganisms (NOEC or ECx)*	Toxicity to other organisms
MEA-C10-13 Alkyl Benzenesulfonate	0.268 mg/L (Mesocosm model ecosystem; 56 d)	0.23 mg/L (Oncorhynchus mykiss; 72 d)	0.268 mg/L (56 d)	-	0.268 mg/L (Read across data on dodecyl linear alkylbenzene sulfonate ; guideline not indicated; mayfly, chironomid, and aquatic worm; freshwater; 56 d)
C12-14 Pareth-n	-	0.28 mg/L (Pimephales promelas; 30 d)	0.77 mg/L (Daphnia magna; 21 d)	-	-
Tetrahydrolinalool	9.5 mg/L (DIN 38 412, L9; Desmodesmus subspicatus; 3 d)	5 mg/L (OECD 203; Danio rerio; 4 d)	8.2 mg/L (OECD 202; Daphnia magna; 2 d)	(EC10: 450 mg/L (DIN 38412-27; Pseudomonas putida; 0.5 h))	-
Methylundecanal	0.089 mg/L (OECD 201; Pseudokirchneriella subcapitata; 3 d)	0.11 mg/L (OECD 203; Oncorhynchus mykiss; 4 d)	0.033 mg/L (OECD 211; Daphnia magna; 21 d)	(100 mg/L (OECD 301F; activated sludge of a predominantly domestic sewage; 22 d))	-
Tetramethyl Acetyloctahydronaphthalenes	2.6 mg/L (OECD 201; Desmodesmus subspicatus; 72 h)	0.16 mg/L (OECD 210; Danio rerio; 30 d)	0.028 mg/L (OECD 211; Daphnia magna; 21 d)	(> 100 mg/L (OECD 301 F; 42 d))	101 (OECD 301 F; activated sludge of a predominantly domestic sewage; 42 d)
Citronellol	1.1 mg/L (Scenedesmus subspicatus; 3 d)	4.6 mg/L (German standard DIN 38 412, part L15.; Leuciscus idus; 4 d)	3.1 mg/L (EU Directive 79/831/EEC, Annex V, part C.; Daphnia magna; 2 d)	(580 mg/L (DIN 38412, Part 27; Pseudomonas putida; 0.02083 d))	-
Protease	0.042 mg/L (OECD 201; Raphidocelis subcapitata; 3 d)	0.15 mg/L (OECD 210; Pimephales promelas; 32 d)	1.14 mg/L (OECD 211; Daphnia magna; 0.875 d)	-	-
Delta-Damascone	0.883 mg/L (OECD 201; Pseudokirchneriella subcapitata; 3 d)	-	0.35 mg/L (OECD 211; Daphnia magna; 21 d)	-	-

12.2. Persistence and degradability

Persistence and degradability

Chemical name	Ready Biodegradation Test (OECD 301)	Abiotic Degradation Hydrolysis	Abiotic Degradation Photolysis	Biodegradation Other Tests
MEA-C10-13 Alkyl Benzenesulfonate	85 % (OECD 301 B; CO2 evolution; 29 d)	-	-	t1/2: < 22 d (Read across data on sodium 4-undecylbenzenesulfonate; guideline not indicated; sludge amended soil)
Mea-Laureth Sulfate	90 % (OECD 303 A)	-	-	-
C12-14 Pareth-n	95 % (O2; OECD 301 F; 28 d)	-	-	-
C12-16 Pareth-n	60 % (OECD 301B; 28d; aerobic)	-	-	-
Tetrahydrolinalool	(60 - 70%O2; OECD 301 F; 28 d)	-	-	-
Methylundecanal	68 % (O2; OECD 301 F; 22 d)	-	-	-
Tetramethyl Acetyloctahydronaphthalenes	96.3 % (OECD 301 F; aerobic; activated sludge, domestic, non-adapted O2 consumption; 28 d)	-	0.054	50 (OECD 314; aerobic; 1.9 d)
Citronellol	(O2; 28 d)	-	-	-

Protease	102 % (EPA OPPTS 835.3110; CO2 evolution; 29 d)	-	-	-
Delta-Damascone	16 % (O2; OECD 301; 28 d)	332 d (OECD 111)	-	0% O2; 28 d; OECD 301 C

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

Chemical name	Partition coefficient
MEA-C10-13 Alkyl Benzenesulfonate	1.73
Methylundecanal	4.9
Tetrahydrolinalool	4.63
Tetramethyl Acetyloctahydronaphthalenes	5.7
Citronellol	3.41
Protease	-3.1

Chemical name	Octanol/water partition coefficient	Bioconcentration factor (BCF)
MEA-C10-13 Alkyl Benzenesulfonate	2.51 (OECD 123)	495 L/kg
C12-14 Pareth-n	5.24 (OECD 123)	-
Tetrahydrolinalool	3.3 (OECD 107)	99.87 L/kg
Methylundecanal	4.9 (OECD 117)	2917 L/kg
Tetramethyl Acetyloctahydronaphthalenes	5.6 (OECD 117)	-
Citronellol	3.41 (EU Method A.8)	82.59 L/kg
Protease	-1.3 (OECD 107)	-

12.4. Mobility in soil

Mobility in soil

Chemical name	log Koc
MEA-C10-13 Alkyl Benzenesulfonate	3.5
C12-14 Pareth-n	267.1
Tetrahydrolinalool	56.3 (56.3)
Methylundecanal	3981 (3981 (OECD 121))
Tetramethyl Acetyloctahydronaphthalenes	4.12
Citronellol	70.79 (70.79)
Delta-Damascone	1259 (1259 (OECD 121))

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

Chemical name	PBT and vPvB assessment
C12-14 Pareth-n	The substance is not PBT / vPvB
Methylundecanal	The substance is not PBT / vPvB
Tetrahydrolinalool	The substance is not PBT / vPvB
Citronellol	The substance is not PBT / vPvB
Protease	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties There are no substances contained at or above the regulated value for declaration of >0.1% that fall under the definition of confirmed endocrine disruptors of any EU regulation.

12.7. Other adverse effects

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused The waste codes/waste designations below are in accordance with EWC. Waste must be

products	delivered to an approved waste disposal company. Waste is to be kept separate from other types of waste until its disposal. Do not throw waste product into the sewer. Where possible recycling is preferred to disposal or incineration. Empty, uncleaned packaging need the same disposal considerations as filled packaging. For handling waste, see measures described in section 8. Dispose of in accordance with local regulations.
Contaminated packaging	Do not reuse empty containers.
Waste codes / waste designations according to EWC / AVV	20 01 29* - detergents containing dangerous substances 15 01 10* - packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

IATA

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	

IMDG

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

ADR

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

ADN

14.1 UN number or ID number	Not relevant
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	No information available
14.4 Packing group	Not relevant
14.5 Marine pollutant	Not regulated

SECTION 15: Regulatory information

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

National regulations

Germany

Water hazard class (WGK) slightly hazardous to water (WGK 1)

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorizations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)
Regulation (EC) No. 648/2004 (Detergents regulation) Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP] Registration, Evaluation, Authorization, and Restriction of Chemicals (REACh) Regulation (EC 1907/2006)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
Protease	75.	-
Isoeugenol	75.	-

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

CESIO Recommendations 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

Chemical Safety Report No chemical safety assessment has been carried out for this mixture per REACH regulation.

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

H302 - Harmful if swallowed
H312 - Harmful in contact with skin
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335 - May cause respiratory irritation
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H411 - Toxic to aquatic life with long lasting effects
H412 - Harmful to aquatic life with long lasting effects

Legend

SVHC: Substances of Very High Concern for Authorization:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	Sk*	Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Chronic aquatic toxicity	Calculation method

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Further information Salts listed in Section 3 without a REACh Registration number are exempt, based on Annex V.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet