



SAFETY DATA SHEET

Rulebook on the contents of the safety data sheet (Official Gazette of RS No. 11/2024)

Issuing Date: 12-Mar-2025

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Revision Number 1

SECTION 1: Identification of the chemical and of the company/ entrepreneur

Subsection 1.1. Product identifier

Product Identifier C-21213409-002_RET_SERB
Product Name LENOR SPRING AWAKENING FABRIC CONDITIONER
Product Form Mixture
Pure substance/mixture Mixture

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

Recommended use Intended for general public
Uses advised against No information available
Main user category SU 21 - Consumer uses: Private households (= general public = consumers)
Product category Liquid Fabric Enhancers
Use category PC35 - Washing and cleaning products (including solvent based products)

Subsection 1.3. Details of the supplier of the safety data sheet

Supplier	Manufacturer
Procter & Gamble UK Brooklands, Weybridge, Surrey, KT13 0XP, UK 01932 896000 Fax: 01932 896200	Procter & Gamble Amiens S.A.S. ZI Nord 150 rue André Durouchez BP 90045 80082 Amiens Cedex 2 France
P&G DCE bvba/sprl-Belgium Dist. Div., Temseleen 100, B-1853 Strombeek-Bever, Belgium (IE) 1800 535 119	

For further information, please contact

E-mail address pgsds.im@pg.com

Subsection 1.4. Emergency telephone number

Emergency Telephone (UK) Emergency Tel: 0800 328 8304

IRELAND CHEMTREC: +353 1 901 4670

SECTION 2: Hazards identification

For consumer use in households, follow precautionary and first aid instructions on product label

Subsection 2.1. Classification of the substance or mixture

Classification according to the Rulebook on the Classification, Packaging, Labeling and Advertising of Chemicals and Certain Products in accordance with the Globally Harmonized System for Classification and Labeling of the UN (Official Gazette of RS No. 105/13, 52/17, 21/19 and 40/23)

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

Hazardous to the Aquatic Environment - Chronic

Subsection 2.2. Label elements

Classification according to the Rulebook on the Classification, Packaging, Labeling and Advertising of Chemicals and Certain Products in accordance with the Globally Harmonized System for Classification and Labeling of the UN (Official Gazette of RS No. 105/13, 52/17, 21/19 and 40/23)

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

Hazard statements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

EUH208 - Contains (E/Z)-ethyl 2-acetyl-4-methyltridec-2-enoate; Methylundecanal; Tetrahydrolinolool; Delta-Damascone May produce an allergic reaction.

Subsection 2.3. Other hazards

Other hazards that do not affect the classification: No PBT and vPvB ingredients are present.

Human health hazards that do not affect the classification: Skin sensitization may occur in sensitive individuals.

Environmental hazards that do not affect classification: No additional data.

Information on endocrine disrupting properties The product does not contain, in concentrations of 0.1% or more, components that have been confirmed by any regulation as substances with the properties of disrupting the endocrine system.

SECTION 3: Composition/information on ingredients

Classification according to the GHS Rulebook (Official Gazette No. 105/13, 52/17, 21/19 and 40/23)

Subsection 3.1 Substances

Not applicable

Subsection 3.2 Mixtures

Chemical name	CAS No.	EC Index Number	EC No (EU Index No)	Weight-%	Classification	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Ethanaminium, 2-hydroxy-N-(2-hydroxyethyl)-N,N-dimethyl-, esters with C16-18 and C18-unsatd. fatty acids, chlorides (cottonseed oil feedstock/mixture of mono- and di-esters)	1079184-43-2		-	1 - 5	Aquatic Chronic 3 (H412)		-	-
Ethanaminium, 2-hydroxy-N-(2-hydroxyethyl)-N,N-dimethyl-, esters with C16-18 and C18-unsatd. fatty acids, chlorides (palm feedstock/mixture of mono- and di-esters)	1079184-43-2		-	1 - 5	Aquatic Chronic 3 (H412)		-	-
(E/Z)-ethyl 2-acetyl-4-methyltridec-2-enoate (NON-TSCA)	960253-23-0		816-455-0	0 - 1	Acute Tox. 4 (H332) Skin Sens. 1 (H317)		-	-
Undecanal, 2-Methyl-	110-41-8		203-765-0	0 - 1	Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Skin Sens. 1B (H317) Aquatic Acute 1 (H400) Aquatic		1	1

					Chronic 1 (H410)			
Tetrahydroxinalool	78-69-3		201-133-9	0 - 1	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) Skin Sens. 1B (H317)		-	-
delta Damascone	57378-68-4		260-709-8 275-156-8	0 - 1	Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Skin Sens. 1A (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)		1	1

Internationally recognized substance name

Chemical name	CAS No.	REACH registration number	Classification
Distearoylethyl/Dipalmitoylethyl Dimonium Chloride	1079184-43-2	01-0000000679-63	Aquatic Chronic 3 (H412)
Distearoylethyl/Dipalmitoylethyl Dimonium Chloride	1079184-43-2	01-0000000679-63	Aquatic Chronic 3 (H412)
(E/Z)-ethyl 2-acetyl-4-methyltridec-2-enoate	960253-23-0	01-2120749108-52	Acute Tox. 4 (H332) Skin Sens. 1 (H317)
Methylundecanal	110-41-8	01-2119969443-29	Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Skin Sens. 1B (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Tetrahydroxinalool	78-69-3	01-2119454788-21	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) Skin Sens. 1B (H317)
Delta-Damascone	57378-68-4	01-2119535122-53	Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Skin Sens. 1A (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)

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

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components. If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from Annex 1, Table 3.1.2 of the GHS Regulations is used to calculate the estimated acute toxicity value (ATEmix) in order to classify a mixture based on its components.

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Ethanaminium, 2-hydroxy-N-(2-hydroxyethyl)-N,N-dimethyl-, esters with C16-18 and C18-unsatd. fatty acids, chlorides (cottonseed oil feedstock/mixture of mono- and di-esters)	No data available	2000	No data available	No data available	No data available
Ethanaminium,	No data available	2000	No data available	No data available	No data available

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
2-hydroxy-N-(2-hydroxyethyl)-N,N-dimethyl-, esters with C16-18 and C18-unsatd. fatty acids, chlorides (palm feedstock/mixture of mono- and di-esters)					
(E/Z)-ethyl 2-acetyl-4-methyltridec-2-enoate (NON-TSCA)	5001	No data available	No data available	11	No data available
Undecanal, 2-Methyl-	5000	9970	No data available	No data available	No data available
Tetrahydrolinalool	8270	5000	No data available	No data available	No data available

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from Annex 1, Table 3.1.2 of the GHS Regulations is used to calculate the estimated acute toxicity value (ATEmix) in order to classify a mixture based on its components.

This product does not contain substances, i.e. substances that are candidates for the List of substances of very high concern in concentrations $\geq 0.1\%$ (Law on Chemicals, Official Gazette of the RS No. 36/09, 88/10, 92/11, 93/12 and 25/15, Article 27).

SECTION 4: First aid measures

Subsection 4.1. Description of first aid measures

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

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

Note to physicians	Treat symptomatically.
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SECTION 5: Firefighting measures

Subsection 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.

Subsection 5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	None in particular.
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Subsection 5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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SECTION 6: Accidental release measures

Subsection 6.1. Personal precautions, protective equipment and emergency procedures

For persons who are not members of the service for responding to an emergency situation Ensure adequate ventilation.

For emergency responders Use personal protection recommended in Section 8.

Subsection 6.2. Environmental precautions

Instructions on environmental precautions See Section 12 for additional Ecological Information.

Subsection 6.3. Methods and material for containment and cleaning up

Methods for containment Scoop absorbed substance into closing containers.

Methods for cleaning up 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.

Subsection 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

Subsection 7.1. Precautions for safe handling

Advice on safe handling Do not eat, drink or smoke when using this product.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Subsection 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.

Subsection 7.3. Specific end use(s)

Specific use(s)

Cleaning/washing agents and additives.

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

SECTION 8: Exposure controls/personal protection

Subsection 8.1. Control parameters

Exposure Limits National maximum allowed concentration at the workplace: The product does not contain components with exposure limit values at the workplace according to the Rulebook on preventive measures for safe and healthy work when exposed to chemical substances (Official Gazette of RS No. 106/2009, 117/2017, 107/ 2021).

Biological occupational exposure limits

The product does not contain components with biological limit values according to the Rulebook on preventive measures for safe and healthy work when exposed to chemical substances (Official Gazette of RS No. 106/2009, 117/2017, 107/2021).

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
Undecanal, 2-Methyl-	10.46 mg/kg bw/day	36.89 mg/m ³	35.7 mg/cm ²	92.21 mg/m ³
Tetrahydrolinalool	3.16 mg/kg bw/day	11.14 mg/m ³	0.19 mg/cm ²	-
delta Damascone	2.1 mg/kg bw/day	1.5 mg/m ³	0.116 mg/cm ²	-

Chemical name	Consumer - oral, long-term - local	Consumer - inhalative, long-term - local	Consumer - dermal, long-term - local
Undecanal, 2-Methyl-	-	22.74 mg/m ³	17.86 mg/cm ²
Tetrahydrolinalool	-	-	0.19 mg/cm ²

delta Damascone	-	-	0.069 mg/cm2
Chemical name	Consumer - oral, long-term - systemic	Consumer - inhalative, long-term - systemic	Consumer - dermal, long-term - systemic
Undecanal, 2-Methyl-	5.23 mg/kg bw	9.1 mg/m ³	5.23 mg/kg bw/day
Tetrahydrolinalool	1.58 mg/kg bw	2.75 mg/m ³	1.58 mg/kg bw/day
delta Damascone	0.25 mg/kg bw	0.43 mg/m ³	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
Undecanal, 2-Methyl-	100 mg/kg bw/day	352.63 mg/m ³	71.43 mg/cm2	881.58 mg/m ³
Tetrahydrolinalool	-	-	2.760 mg/cm ²	-
delta Damascone	-	-	0.014 mg/cm ²	-

Chemical name	Consumer - inhalative, short-term - local	Consumer - dermal, short-term - local
Undecanal, 2-Methyl-	217.39 mg/m ³	35.71 mg/cm2
Tetrahydrolinalool	-	2.760 mg/cm ²
delta Damascone	-	0.009 mg/cm2

Chemical name	Consumer - oral, short-term - systemic	Consumer - inhalative, short-term - systemic	Consumer - dermal, short-term - systemic
Undecanal, 2-Methyl-	25 mg/kg bw	86.96 mg/m ³	50 mg/kg bw/day

Predicted No Effect Concentration (PNEC)

Chemical name	Fresh Water	Marine water	Intermittent release
Ethanaminium, 2-hydroxy-N-(2-hydroxyethyl)-N,N-dimethyl-, esters with C16-18 and C18-unsatd. fatty acids, chlorides (cottonseed oil feedstock/mixture of mono- and di-esters)	0.054 mg/L	0.005 mg/L	-
Ethanaminium, 2-hydroxy-N-(2-hydroxyethyl)-N,N-dimethyl-, esters with C16-18 and C18-unsatd. fatty acids, chlorides (palm feedstock/mixture of mono- and di-esters)	0.054 mg/L	0.005 mg/L	-
Undecanal, 2-Methyl-	0.66 mg/L	0 mg/L	0.002 mg/L
Tetrahydrolinalool	0.009 mg/L	0.001 mg/L	0.089 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
Ethanaminium, 2-hydroxy-N-(2-hydroxyethyl)-N,N-dimethyl-, esters with C16-18 and C18-unsatd. fatty acids, chlorides (cottonseed oil feedstock/mixture of mono- and di-esters)	109 mg/kg dwt	10.9 mg/kg dwt	4.74 mg/L	534 mg/kg dwt	-	-
Ethanaminium, 2-hydroxy-N-(2-hydroxyethyl)-N,N-dimethyl-, esters with C16-18 and C18-unsatd. fatty acids, chlorides (palm feedstock/mixture of mono- and di-esters)	109 mg/kg dwt	10.9 mg/kg dwt	4.74 mg/L	534 mg/kg dwt	-	-
Undecanal, 2-Methyl-	0.265 mg/kg dwt	0.027 mg/kg dwt	10 mg/L	0.053 mg/kg dwt	-	-

Tetrahydroinalool	0.082 mg/kg dwt	0.008 mg/kg dwt	450 mg/L	0.011 mg/kg dwt	-	-
delta Damascone	0.958 mg/kg dwt	0.096 mg/kg dwt	2.41 mg/L	0.187 mg/kg dwt	-	-

Subsection 8.2. Exposure controls

Engineering controls	No Data Available.
Personal protective equipment	
Eye/face protection	No special protective equipment required.
Hand protection	No special protective equipment required.
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	Handle in accordance with good industrial hygiene and safety practice.
Environmental exposure controls	Prevent that the undiluted product reaches surface waters.

SECTION 9: Physical and chemical properties

Subsection 9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Liquid
Color	colored
Odor	Pleasant (perfume)
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
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	95 - 110 °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	2.5 - 3.8	
Dynamic viscosity	120 - 315 mPa s	
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	0.97 - 1.1	
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

Subsection 9.2. Other information**Subsection 9.2.1. Information with regard to physical hazard classes**
No information available**Subsection 9.2.2. Other safety characteristics**
No information available**SECTION 10: Stability and reactivity****Subsection 10.1. Reactivity****Reactivity** No information available.**Subsection 10.2. Chemical stability****Stability** Stable under normal conditions.**Explosion data****Sensitivity to mechanical impact** None.**Sensitivity to static discharge** None.**Subsection 10.3. Possibility of hazardous reactions****Possibility of hazardous reactions** None under normal processing.**Subsection 10.4. Conditions to avoid****Conditions to avoid** None known based on information supplied.**Subsection 10.5. Incompatible materials****Incompatible materials** None known based on information supplied.**Subsection 10.6. Hazardous decomposition products****Hazardous decomposition products** None known based on information supplied.**SECTION 11: Toxicological information****Subsection 11.1. Information on the health hazard classes established by the regulation governing the classification, packaging and labeling of chemicals****Information on likely routes of exposure****Product Information****Inhalation** None known.**Eye contact** None known.**Skin contact** None known.**Ingestion** None known.**Symptoms related to the physical, chemical and toxicological characteristics****Symptoms** None.**Numerical measures of toxicity**

No information available

Acute toxicity Not Classified. Based on the available data, the classification criteria are not met

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ethanaminium, 2-hydroxy-N-(2-hydroxyethyl)-N, N-dimethyl-, esters with C16-18 and C18-unsatd. fatty acids, chlorides (cottonseed oil feedstock/mixture of mono- and di-esters)	10001 mg/kg (RAT)	5001 mg/kg (RABBIT)	-
Ethanaminium, 2-hydroxy-N-(2-hydroxyethyl)-N, N-dimethyl-, esters with C16-18 and C18-unsatd. fatty acids, chlorides (palm feedstock/mixture of mono- and di-esters)	10001 mg/kg (RAT)	5001 mg/kg (RABBIT)	-
(E/Z)-ethyl 2-acetyl-4-methyltridec-2-enoate (NON-TSCA)	5001 mg/kg (RAT)	-	5 mg/L (Rat)
Undecanal, 2-Methyl-	5001 mg/kg (RAT)	8281 mg/kg (Rabbit)	-
Tetrahydrolinalool	8270 mg/kg bw	5001 mg/kg (RABBIT)	> 0.885 mg/L air
delta Damascone	1400 mg/kg (RAT)	5001 mg/kg (RABBIT)	-

Chemical name	Carcinogenicity	Species	Eye Damage	Species	Developmental toxicity	Species	Mutagenicity	Species
Tetrahydrolinalool	-	-	Y	-	-	-	-	-

Chemical name	Reproductive toxicity	Species	Skin corrosion/irritation	Species	Sensitization	Species
Undecanal, 2-Methyl-	-	-	Y	-	-	-
Tetrahydrolinalool	-	-	Y	-	-	-
delta Damascone	-	-	Y (OECD 439)	-	-	-

Chemical name	Skin sensitization	Species	STOT - single exposure	STOT RE 1 target organ(s)	Species	STOT - repeated exposure	STOT RE 2 target organ(s)	Species	Aspiration hazard
(E/Z)-ethyl 2-acetyl-4-methyltridec-2-enoate (NON-TSCA)	Y (OECD 442 D)	-	-	-	-	-	-	-	-
Undecanal, 2-Methyl-	Y (OECD 429)	-	-	-	-	-	-	-	-
Tetrahydrolinalool	Y (OECD 429)	-	-	-	-	-	-	-	-
delta Damascone	N (OECD 429)	-	-	-	-	-	-	-	-

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

Skin corrosion / skin irritation Not applicable.

Serious eye damage/eye irritation Not applicable.

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.

Subsection 11.2. Information on other hazards

Subsection 11.2.1. Endocrine disrupting properties

Endocrine disrupting properties The product does not contain, in concentrations of 0.1% or more, components that have been confirmed by any regulation as substances with the properties of disrupting the endocrine system.

Subsection 11.2.2. Other information

Other adverse effects None known.

SECTION 12: Ecological information

Subsection 12.1. Toxicity

Ecotoxicity Not considered to be harmful to aquatic life. No known adverse effects on the functioning of water treatment plants under normal use conditions as recommended.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ethanaminium, 2-hydroxy-N-(2-hydroxyethyl)-N,N-dimethyl-, esters with C16-18 and C18-unsatd. fatty acids, chlorides (cottonseed oil feedstock/mixture of mono- and di-esters)	-	LC50: =5.2mg/L (96h, Danio rerio)	-	-
Ethanaminium, 2-hydroxy-N-(2-hydroxyethyl)-N,N-dimethyl-, esters with C16-18 and C18-unsatd. fatty acids, chlorides (palm feedstock/mixture of	-	LC50: =5.2mg/L (96h, Danio rerio)	-	-

mono- and di-esters)				
Undecanal, 2-Methyl-	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)
Tetrahydrolinolool	21.6 mg/L (Desmodesmus subspicatus; 72 h)	8.9 mg/L (OECD 203; Danio rerio; 96 h)	1000 mg/L (Pseudomonas putida; 0.5 h)	14.2 mg/L (OECD 202; Daphnia magna; 48 h)
delta Damascone	4.54 mg/L (OECD 201; Raphidocelis 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
Ethanaminium, 2-hydroxy-N-(2-hydroxyethyl)-N,N-dimethyl-, esters with C16-18 and C18-unsatd. fatty acids, chlorides (cottonseed oil feedstock/mixture of mono- and di-esters)	2.7 mg/L (OECD 201; Raphidocelis subcapitata; 3 d)	0.686 mg/L (Pimephales promelas; 35 d)	1 mg/L (EPA OTS 797.1330; Daphnia magna; 21 d)	(47.5 mg/L (OECD 209; activated sludge; 0.125 d))	-
Ethanaminium, 2-hydroxy-N-(2-hydroxyethyl)-N,N-dimethyl-, esters with C16-18 and C18-unsatd. fatty acids, chlorides (palm feedstock/mixture of mono- and di-esters)	2.7 mg/L (OECD 201; Raphidocelis subcapitata; 3 d)	0.686 mg/L (Pimephales promelas; 35 d)	1 mg/L (EPA OTS 797.1330; Daphnia magna; 21 d)	(47.5 mg/L (OECD 209; activated sludge; 0.125 d))	-
Undecanal, 2-Methyl-	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))	-
Tetrahydrolinolool	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))	-
delta Damascone	0.38 mg/L (OECD 201; Raphidocelis subcapitata; 3 d)	0.118 mg/L (OECD 210; Pimephales promelas; 32 d)	0.35 mg/L (OECD 211; Daphnia magna; 21 d)	-	-

Subsection 12.2. Persistence and degradability

Persistence and degradability

Note: The surfactants contained in this product comply with the biodegradability criteria established by the Rulebook on Detergents (Official Gazette of RS, No. 25/2015). Data proving these claims are available to the competent authorities and will be made available to them upon direct request or upon request of the detergent manufacturer.

Chemical name	Ready Biodegradation Test (OECD 301)	Abiotic Degradation Hydrolysis	Abiotic Degradation Photolysis	Biodegradation Other Tests
Ethanaminium, 2-hydroxy-N-(2-hydroxyethyl)-N,N-dimethyl-, esters with C16-18 and C18-unsatd. fatty acids, chlorides (cottonseed oil feedstock/mixture of mono- and di-esters)	81 % (CO ₂ ; OECD 301 B; 28 d)	-	-	-
Ethanaminium, 2-hydroxy-N-(2-hydroxyethyl)-N,N-dimethyl-, esters with C16-18 and C18-unsatd. fatty acids, chlorides (palm feedstock/mixture of mono- and di-esters)	81 % (CO ₂ ; OECD 301 B; 28 d)	-	-	-
(E/Z)-ethyl 2-acetyl-4-methyltridec-2-enoate (NON-TSCA)	62 % (O ₂ ; OECD 301 F; 28 d)	-	-	-
Undecanal, 2-Methyl-	68 % (O ₂ ; OECD 301 F; 22 d)	-	-	-

	d)			
Tetrahydrolinalool	65 % (OECD 301 F; O2; 28 d; 10-day window criteria fulfilled; 28 d)	-	1.125	-
delta Damascone	16 % (O2; OECD 301; 28 d)	332 d (OECD 111)	-	0% O2; 28 d; OECD 301 C

Subsection 12.3. Bioaccumulative potential

Bioaccumulation

Component Information

Mixture components informations

Chemical name	Partition coefficient
(E/Z)-ethyl 2-acetyl-4-methyltridec-2-enoate (NON-TSCA)	6.6
Undecanal, 2-Methyl-	4.9
Tetrahydrolinalool	3.3

Chemical name	Octanol/water partition coefficient	Bioconcentration factor (BCF)
Ethanaminium, 2-hydroxy-N-(2-hydroxyethyl)-N,N-dimethyl-, esters with C16-18 and C18-unsatd. fatty acids, chlorides (cottonseed oil feedstock/mixture of mono- and di-esters)	3.8	13 L/kg
Ethanaminium, 2-hydroxy-N-(2-hydroxyethyl)-N,N-dimethyl-, esters with C16-18 and C18-unsatd. fatty acids, chlorides (palm feedstock/mixture of mono- and di-esters)	3.8	13 L/kg
(E/Z)-ethyl 2-acetyl-4-methyltridec-2-enoate (NON-TSCA)	5.3 (OECD 117)	-
Undecanal, 2-Methyl-	4.9 (OECD 117)	2917 L/kg
Tetrahydrolinalool	3.3 (OECD 107)	99.87 L/kg
delta Damascone	4.2	-

Subsection 12.4. Mobility in soil

Mobility in soil

Chemical name	log Koc
Distearoylethyl/Dipalmitoylethyl Dimonium Chloride	20225 (OECD 106)
Distearoylethyl/Dipalmitoylethyl Dimonium Chloride	20225 (OECD 106)
(E/Z)-ethyl 2-acetyl-4-methyltridec-2-enoate	10 - 79432.8 (OECD 121)
Methylundecanal	3981 (3981 (OECD 121))
Tetrahydrolinalool	56.3 (56.3)
Delta-Damascone	1259 (1259 (OECD 121))

Subsection 12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

No information available.

Chemical name	PBT and vPvB assessment
Ethanaminium, 2-hydroxy-N-(2-hydroxyethyl)-N,N-dimethyl-, esters with C16-18 and C18-unsatd. fatty acids, chlorides (cottonseed oil feedstock/mixture of mono- and di-esters)	The substance is not PBT / vPvB
Ethanaminium, 2-hydroxy-N-(2-hydroxyethyl)-N,N-dimethyl-, esters with C16-18 and C18-unsatd. fatty acids, chlorides (palm feedstock/mixture of mono- and di-esters)	The substance is not PBT / vPvB
(E/Z)-ethyl 2-acetyl-4-methyltridec-2-enoate (NON-TSCA)	The substance is not PBT / vPvB
Undecanal, 2-Methyl-	The substance is not PBT / vPvB
Tetrahydrolinalool	The substance is not PBT / vPvB

Subsection 12.6. Endocrine disrupting properties

Endocrine disrupting properties

The product does not contain, in concentrations of 0.1% or more, components that have been confirmed by any regulation as substances with the properties of disrupting the endocrine system.

Subsection 12.7. Other adverse effects

SECTION 13: Disposal considerations

Subsection 13.1. Waste treatment methods

Waste from residues/unused products	The waste codes/waste designations below are in accordance with EWC. Waste must be 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.
Index numbers and description of waste in accordance with the Rulebook on categories, testing and classification of waste:	20 01 29* - detergents containing dangerous substances 15 01 10* - packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

IATA

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

IMDG

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

RID

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

ADR

Subsection 14.1 UN number or ID number Not regulated

Subsection 14.2

Subsection 14.3 Transport hazard class(es) Not regulated

Subsection 14.4 Packing group Not regulated

Subsection 14.5 Environmental hazards Not applicable

Subsection 14.6 Special precautions for user

Special Provisions None

ADN

Subsection 14.1 UN number or ID number Not relevant

Subsection 14.2

Subsection 14.3 Transport hazard class(es) No information available

Subsection 14.4 Packing group Not relevant

Subsection 14.5 Marine pollutant Not regulated

SECTION 15: Regulatory information

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

National regulations

Serbia

In addition to the Law on Environmental Protection (Official Gazette of RS No. 135/04, 36/09, 72/09, 43/11, 14/16, 76/18 and 95/18), as an umbrella law, and the Law on Chemicals (Official Gazette of the RS No. 36/09, 88/10, 92/11, 93/12 and 25/15) and accompanying regulations, such as the Rulebook on classification, packaging, labeling and advertising of chemicals and certain products in accordance with Globally Harmonized System for Classification and Labeling of the UN (Official Gazette of the RS No. 105/13, 52/17, 21/19 and 40/23), Rulebook on Detergents (Official Gazette of the RS No. 25/15), Rulebook on Safety Data Sheet Content (Official Gazette of the RS no. 11/2024), Rulebook on the list of classified substances (Official Gazette of the RS no. 41/23), Rulebook on restrictions and prohibitions on the production, placing on the market and use of chemicals (Official Gazette of the RS no. 90/13, 25/15, 2/16, 44/17, 36/18, 9/20 and 57/22), Lists of substances of concern (Official Gazette of RS No. 94/13, 101/16, 22/18 and 86/21) and Lists of Candidate Substances for the List of Substances of Concern (Fig. RS Gazette no. 58/16, 22/18, 86/21 and 83/23) the following laws and by-laws should also be taken into account: Law on Items of General Use (Official Gazette of RS No. 25/2019 and 14/2022), Law on Safety and Health at work (Official Gazette of the RS No. 101/05, 91/15 and 113/17), Rulebook on preventive measures for safe and healthy work when exposed to chemical substances (Official Gazette of the RS No. 106/2009, 117/2017, 107 /2021), Rulebook on preventive measures for safe and healthy work in case of exposure to carcinogens and mutagens (Official Gazette of the RS No. 96/11 and 117/17), Law on Packaging and Packaging Waste (Official Gazette of the RS No. 36/09 and 95/18), Law on Waste Management (Official Gazette of the RS No. 36/09, 88/10, 14/16 and 95/18), Rulebook on Categories, Testing and Classification of Waste (Official Gazette of the RS No. 56 /2010, 93/2019, 39/2021), the Law on the Transport of Dangerous Goods (Official Gazette of RS No. 88/10, 104/16 and 83/18) and other relevant regulations for the given chemical.

Permissions and/or restrictions on use This product contains one or more substances that are subject to restrictions according to the Regulation on restrictions and prohibitions of production, marketing and use of chemicals. This product does not contain substances on the List of Substances of Concern and the List of Candidate Substances for the List of Substances of Concern. The classification and procedure used for the classification and labeling of the mixture is in accordance with the Rulebook on the Classification, Packaging, Labeling and Advertising of Chemicals and Certain Products in accordance with the Globally Harmonized System for Classification and Labeling of the UN (Official Gazette of RS No. 105/13, 52/17, 21/19 and 40/23) and the Rulebook on detergents (Official Gazette of RS No. 25/2015).

Subsection 15.2. Chemical safety assessment

Chemical Safety Report

No chemical safety assessment has been carried out for this mixture.

SECTION 16: Other information

Classification according to the GHS Rulebook (Official Gazette No. 105/13, 52/17, 21/19 and 40/23)

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

IMDG: International Maritime Dangerous Goods Code, RID - Agreement on international rail transport of dangerous goods, ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road, ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

Full text of any hazard and/or precautionary statements referred to under Sections 2-15

H302 - Harmful if swallowed
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H412 - Harmful to aquatic life with long lasting effects

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

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief as of the date of its publication. The information provided is designed only as a guideline for safe handling, use, processing, storage, transportation, disposal, release and should not be considered a specification or guarantee of quality. The data refer only to the specific material and may not apply to such material used in combination with other materials or in processes other than those for which it is intended, unless otherwise stated in the text.

End of Safety Data Sheet