

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

Date of revision: 26. 09. 2024

Version: 2.0

Replaced version from: 12. 02. 2021

Date of issue: 12. 02. 2021

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

1.1. Product identifier

Product Name

CLEAMEN 147

UFI code

UFI: VTV0-A0A4-4000-D8GV

Product code

TC14701.

Mixture description

Aqueous solution.

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

Identified uses

A product designed for machine and manual washing of waterproof floor coverings with a pleasant perfume. Professional use.

Uses advised against

Not known. It is recommended to use it only for the intended use. Other uses may expose users to unpredictable risks.

1.3. Details of the supplier of the safety data sheet

CORMEN s.r.o.

Věchnov 73

593 01

Czech Republic

Tel.: +420 566 550 961

Fax: +420 566 551 822

e-mail address for a competent person responsible for the SDS: info@cormen.cz

1.4. Emergency telephone number

112 (General emergency phone).

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture is classified as **hazardous** according to regulation 1272/2008/EC.

Classification according to 1272/2008/EC

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

Skin Sens. 1A; H317

Eye Dam. 1; H318

Aquatic Chronic 3; H412

Full text of classifications and H-phrases: see section 16.

The most important adverse physical, human health and environmental effects

May cause an allergic skin reaction. Causes serious eye damage. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictograms



Signal word

Danger.

Substances of the mixture to be placed on the label

Contains Undecanol, branched and linear, ethoxylated, propoxylated (≥ 2.5 moles EO/PO), Sodium etasulfate, N,N-Dimethyldecylamine N-oxide, Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1), Reaction mass of 1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,4,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one.

Hazard statements

H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water and soap
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P501	Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Dispose of the cleaned packaging without any residual product content in the sorted waste.

Supplemental hazard information

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

Mandatory additional information is not required according to CLP regulation.

Composition according to regulation 648/2004/EC on detergents: ≥ 5 - < 15 % non-ionic surfactants, < 5 % anionic surfactants, perfumes, preservation agents (BENZYL ALCOHOL, METHYLCHLOROISOTHIAZOLINONE AND METHYLISOTHIAZOLINONE).

2.3. Other hazards

Mixture does not contain substance(s) meeting the criteria for persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) in accordance with Annex XIII of REACH regulation. The mixture and its substances are not mentioned on the Candidate list for possible inclusion in Annex XIV of REACH at the date of the revision of the safety data sheet (established in accordance with Article 59(1) of REACH regulation., Mixture does not contain the substance(s) identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

3.2.1. Substances of a mixture classified as hazardous

Identification of substance		Content wt. %	Classification according to 1272/2008/EC
Undecanol, branched and linear, ethoxylated, propoxylated (≥ 2.5 moles EO/PO)			
CAS Number	not given	1 - < 10	Acute Tox. 4; H302 Eye Dam. 1; H318
EC Number	940-634-3		
Index Number	not given		
Registration Number	is not subject to registration, it is a polymer		
Sodium etasulfate			
CAS Number	126-92-1	1 - < 5	Skin Irrit. 2; H315 Eye Dam. 1; H318
EC Number	204-812-8		
Index Number	not given		
Registration Number	01-2119971586-23-XXXX		
The substance has a bulk density ≥ 400 g/l.			
The substance has specific concentration limits:			
Eye Dam. 1; H318		$C \geq 20$ %	
Eye Irrit. 2; H319		$10\% \leq C < 20$ %	
N,N-Dimethyldecylamine N-oxide			
CAS Number	2605-79-0	1 - < 5	Acute Tox. 4; H302 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 2; H411 M=1
EC Number	220-020-5		
Index Number	not given		
Registration Number	01-2119959297-22-XXXX		
Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate			
CAS Number	51981-21-6	1 - < 3	Met. Corr. 1; H290
EC Number	257-573-7		
Index Number	not given		
Registration Number	01-2119493601-38-XXXX		

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

Met. Corr. 1; H290 only applies to aqueous solutions depending on concentration, pH and composition.

Reaction mass of 1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,4,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one

CAS Number	not given		Skin Irrit. 2; H315
EC Number	915-730-3		Skin Sens. 1B; H317
Index Number	not given	0.1 - < 1	Aquatic Chronic 1; H410
Registration Number	01-2119489989-04-XXXX		M(Chronic) = 1

Ethanediol; Ethylene glycol

CAS Number	107-21-1		
EC Number	203-473-3		Acute Tox. 4; H302
Index Number	603-027-00-1	< 0.1	STOT RE 2; H373
Registration Number	not yet available		

Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

			Acute Tox. 3; H301
			Acute Tox. 2; H310
			Skin Corr. 1C; H314
			Eye Dam. 1; H318
CAS Number	55965-84-9		Skin Sens. 1A; H317
EC Number	not given		Acute Tox. 2; H330
Index Number	613-167-00-5	< 0.0035	Aquatic Acute 1; H400
Registration Number	not yet available		Aquatic Chronic 1; H410
			EUH071
			M=100
			M(Chronic)=100

The substance has specific concentration limits:

Skin Corr. 1C; H314	C ≥ 0.6 %
Eye Dam. 1; H318	C ≥ 0.6 %
Skin Irrit. 2; H315	0.06 % ≤ C < 0.6 %
Eye Irrit. 2; H319	0.06 % ≤ C < 0.6 %
Skin Sens. 1A; H317	C ≥ 0.0015 %

Full text of classifications and H-phrases: see section 16.

SECTION 4: First aid measures

In all cases keep the victim at physical and mental rest and warm. In case of doubt or if symptoms persist, seek medical attention. Never give anything by mouth if victim is rapidly losing consciousness, unconscious or convulsing. Protect yourself during rescue work.

4.1. Description of first aid measures

Inhalation

Interrupt the exposure, move the person to the fresh air. In case of persistent nausea, seek medical advice.

Skin contact

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

Remove contaminated clothing, shoes, and wash thoroughly with water (preferably lukewarm) and soap. Do not use solvents or thinners. If the problem persists, seek medical advice.

Eye contact

Rinse with a gentle stream of water for at least 15 minutes. Keep your eyelids wide open with your thumb and forefinger. If the affected person is wearing contact lenses, remove them before rinsing eyes if it is easy. Seek medical advice.

Ingestion

Rinse your mouth and then drink plenty of water. Do not induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Seek medical advice.

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

Are not known.

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

Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

The product is non-flammable. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

Solid streams of water may be ineffective.

5.2. Special hazards arising from the substance or mixture

In case of fire extinguishing prevent leakage of water and rest of product into drains. Collect them separately and dispose of safely in accordance with current legislation and applicable local regulations.

In case of fires, hazardous combustion gases are formed: carbon oxides, nitrogen oxides, ammonia, sulphur oxides, hydrogen sulphide, chlorine oxides, hydrogen chloride and products of incomplete combustion.

5.3. Advice for firefighters

Stop further leakage of product if possible. Spilled product, which does not burn, cover with sand or foam. Move containers and barrels away from the fire to a safe place, if possible. Cool all affected containers down with flooding quantities of water. If the fire can't be extinguished - evacuate the premises.

In case of fire, wear suitable respiratory protective equipment and fire-fighting suit.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes, use suitable protective equipment and clothing, see Section 8. Ensure adequate ventilation. Avoid formation of vapour and aerosol. At the point of leakage, prevent the movement of unauthorized persons.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. If this cannot be avoided, inform the competent authorities (police and firefighters) immediately.

6.3. Methods and material for containment and cleaning up

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

According to the amount of spilled liquid, drain away the substance (large spillage) or in case of small spillage, absorb it with suitable absorbent (vermiculite, dry sand), put into labelled closed containers and dispose of them accordingly to Section 13. Flush residues with water and collect it for waste disposal. Do not use solvents or dispersants unless instructed by an expert or government authority.

If container is damaged, remove the content to the new undamaged container and label it properly again.

6.4. Reference to other sections

Refer also to the provisions of sections 7, 8 and 13 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes. Personal protection see. Section 8. Ensure good ventilation to prevent formation of vapor and aerosol.

Smoking, eating and drinking should be prohibited at the place of use. Keep safety regulations for handling chemicals. Take off contaminated clothing and protective equipment before entering the dining area. Do not use dirty clothing. After work wash yourself carefully with warm water and soap, take a shower. Use protective cream.

7.2. Conditions for safe storage, including any incompatibilities

Store in original, tightly closed containers, in a dry, cool and well-ventilated place at room temperature.

Protect from frost.

Do not store together with incompatible materials (see subsection 10.5), food, drink and feed.

7.3. Specific end use(s)

See subsection 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Exposure limit value

Ethandiol CAS: 107-21-1

Limit values - Eight hours	Limit values - Short-term	Note
52 mg/m ³ 20 ppm	104 mg/m ³ 40 ppm	Skin

8.1.2. Biological limit values

Not determined in EU.

8.1.3. DNEL and PNEC values

Sodium etasulfate CAS: 126-92-1

DNEL

Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	285 mg/m ³
Workers	Dermal	Systemic effect	Long term	4 060 mg/kg/day
General population	Inhalation	Systemic effect	Long term	85 mg/m ³
General population	Dermal	Systemic effect	Long term	2 440 mg/kg/day
General population	Oral	Systemic effect	Long term	24 mg/kg/day

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

PNEC				
Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
		Fresh water	Marine water	
0.136 mg/l	0.014 mg/l	4.83 mg/l	not given	1.35 mg/l
PNEC				
Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
1.5 mg/l	0.15 mg/kg	no effect	0.22 mg/kg	no effect
N,N-Dimethyldecylamine N-oxide				CAS: 2605-79-0
DNEL				
Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	6.2 mg/m ³
Workers	Dermal	Systemic effect	Long term	11 mg/kg/day
General population	Inhalation	Systemic effect	Long term	1.53 mg/m ³
General population	Dermal	Systemic effect	Long term	5.5 mg/kg/day
General population	Oral	Systemic effect	Long term	0.44 mg/kg/day
PNEC				
Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
		Fresh water	Marine water	
0.034 mg/l	0.003 mg/l	0.034 mg/l	0.003 mg/l	4.59 mg/l
PNEC				
Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
5.24 mg/kg	0.524 mg/kg	no effect	1.02 mg/kg	11.1 mg/kg food
Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate				CAS: 51981-21-6
DNEL				
Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	7.3 mg/m ³
Workers	Dermal	Systemic effect	Long term	15 000 mg/kg/day
General population	Inhalation	Systemic effect	Long term	1.8 mg/m ³
General population	Dermal	Systemic effect	Long term	7 500 mg/kg/day
General population	Oral	Systemic effect	Long term	1.5 mg/kg/day
PNEC				
Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
		Fresh water	Marine water	
9.45 mg/l	0.945 mg/l	0.953 mg/l	0.095 mg/l	41.2 mg/l
PNEC				
Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

4.12 mg/kg	0.412 mg/kg	no effect	0.5 mg/kg	67 mg/kg food
Reaction mass of 1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,4,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one EC: 915-730-3				
DNEL				
Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	30 mg/m ³
Workers	Dermal	Systemic effect	Long term	28.7 mg/kg/day
Workers	Dermal	Local effect	Long term	648 µg/cm ²
General population	Inhalation	Systemic effect	Long term	9 mg/m ³
General population	Dermal	Systemic effect	Long term	17.2 mg/kg/day
General population	Dermal	Local effect	Long term	380 µg/cm ²
General population	Oral	Systemic effect	Long term	3 mg/kg/day
PNEC				
Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
		Fresh water	Marine water	
25 µg/l	2.5 µg/l	not given	not given	10 mg/l
PNEC				
Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
3.73 mg/kg	0.75 mg/kg	not effect	2.7 mg/kg	26.7 mg/kg food
8.2. Exposure controls				
8.2.1. Appropriate engineering controls				
Use only in well-ventilated areas.				
Observe usual safety precautions for working with chemicals. The degree of effectiveness of personal protective equipment depends on temperature and ventilation levels.				
8.2.2. Individual protection measures, such as personal protective equipment				
Do not eat, drink or smoke. After work, wash thoroughly with warm water and soap and take a shower. Use protective cream. Do not soiled protective equipment to wash, do not use solvents.				
Eye/face protection				
Wear safety glasses or face shield (EN 166, EN 149+A1).				
Skin protection - hand protection				
Wear protective gloves (EN 374-1, EN 374-2).				
Recommended gloves material:				
nitrile rubber, breakthrough time: > 480 min., glove thickness: ≥ 0.4 mm				
butyl rubber, breakthrough time: > 480 min., glove thickness: ≥ 0.4 mm				
The selection of the glove material on consideration of the breakthrough time, permeability, degradation and next relevant factors; other chemicals that may come into contact, physical requirements (cut and puncture protection, dexterity, thermal protection), possible body reactions to the glove material and the glove supplier's instructions and specifications. In case of repeated use of gloves, clean and keep them in a well-ventilated place before taking off.				

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

Skin protection - other

Suitable protective working clothing and protective footwear.

Respiratory protection

Not necessary in case of compliance concentration limits (if they were exceeded, use respiratory protection). In the event of an accident or a fire use self-contained breathing apparatus.

Thermal hazards

In normal use is not necessary protective equipment to be worn for materials that represent a thermal hazard.

8.2.3. Environmental exposure controls

Uncontrolled release of the mixture into environment is to be avoided. Keep the emission limits according to national legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Mixture

Physical state	Liquid.
Colour	Light violet.
Odour	Characteristic.
Melting point/freezing point	Not determined.
Boiling point or initial boiling point and boiling range	Not determined.
Flammability	Not determined.
Lower explosion limit	Not determined.
Upper explosion limit	Not determined.
Flash point	Not determined.
Auto-ignition temperature	Not determined.
Decomposition temperature	Not determined, the mixture does not contain self-reactive substances or organic peroxides.
pH	9 – 10.
Kinematic viscosity	Not determined, the mixture does not contain a substance classified as aspiration toxic, or the sum of the concentrations of substances classified as aspiration toxic is less than 10 wt. %.
Solubility	Not determined.
Partition coefficient n-octanol/water (log value)	Does not apply to mixture.
Vapour pressure	Not determined.
Density and/or relative density	1.0546 g/cm ³ (23 °C).
Relative vapour density	Not determined.
Particle characteristics	Does not apply to liquid.

Sodium etasulfate

CAS: 126-92-1

Physical state	Solid.
-----------------------	--------

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

Colour	Not determined.
Odour	Not determined.
Melting point/freezing point	> 181 °C (decomposition, OECD 102).
Boiling point or initial boiling point and boiling range	Not determined, substance decomposes.
Flammability	The substance with bulk density ≥ 400 g/l is not classified as flammable.
Lower explosion limit	Does not apply to solid.
Upper explosion limit	Does not apply to solid.
Flash point	Does not apply to solid.
Auto-ignition temperature	Not determined, the heating temperature of the substance is higher than 400 °C (EU method A.16).
Decomposition temperature	181 °C (OECD 102).
pH	Not determined.
Kinematic viscosity	Does not apply to solid.
Solubility	> 500 g/l (20 °C, pH = 7.3, OECD 105).
Partition coefficient n-octanol/water (log value)	log Pow = -0.248 (25 °C, pH = 8.97 – 8.98, OECD 123).
Vapour pressure	≤ 1.2 Pa (20 °C, OECD 104)
Density and/or relative density	$D_4^{20} = 1.268$ (OECD 109).
Relative vapour density	Does not apply to solid.
Particle characteristics	Not determined.
N,N-Dimethyldecylamine N-oxide CAS: 2605-79-0	
Physical state	Solid.
Colour	White.
Odour	Not determined.
Melting point/freezing point	133 -136 °C (literature).
Boiling point or initial boiling point and boiling range	Not determined.
Flammability	The substance is not classified as flammable (EU method A.10).
Lower explosion limit	Does not apply to solid.
Upper explosion limit	Does not apply to solid.
Flash point	Does not apply to solid.
Auto-ignition temperature	Does not apply to solid.
Decomposition temperature	Not determined, it is not a self-reactive substance or an organic peroxide or a substance that may decompose.
pH	Not determined.

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

Kinematic viscosity	Does not apply to solid.
Solubility	409.5 g/l.
Partition coefficient n-octanol/water (log value)	log Pow = 0.95 (calculation)
Vapour pressure	0 Pa (25 °C, calculation)
Density and/or relative density	$D_4^{23} = 0.716$ (EU method A.3).
Relative vapour density	Does not apply to solid.
Particle characteristics	Not determined.
Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate	CAS: 51981-21-6
Physical state	Solid.
Colour	White to off-white.
Odour	Odourless.
Melting point/freezing point	> 280 °C (decomposition, OECD 102).
Boiling point or initial boiling point and boiling range	Not determined, substance decomposes.
Flammability	Non-flammable solid. The substance is not classified as flammable (UN-N1 test), pyrophoric (UN-N2 and N4 test) or emit flammable gases under standard conditions (UN-N5 test).
Lower explosion limit	Does not apply to solid.
Upper explosion limit	Does not apply to solid.
Flash point	Does not apply to solid.
Auto-ignition temperature	460 °C (IEC 1241-2-1).
Decomposition temperature	280 °C (OECD 102).
pH	Not determined.
Kinematic viscosity	Does not apply to solid.
Solubility	65 wt. % (21 °C, pH = 7, OECD 105).
Partition coefficient n-octanol/water (log value)	log Pow < 0 (27 °C, pH = 7, OECD 117).
Vapour pressure	0.8 mbar (20 °C)
Density and/or relative density	$D_4^{20} = 1.466$ (OECD 109).
Relative vapour density	Does not apply to solid.
Particle characteristics	D10 = 6.9 µm (NEN-ISO 13320). D50 = 51.5 µm (NEN-ISO 13320). D90 = 164 µm (NEN-ISO 13320). Size < 100 µm, distribution 70.4 % (NEN-ISO 13320).
Reaction mass of 1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,4,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one EC: 915-730-3	
Physical state	Liquid.

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

Colour	Clear.
Odour	Fragrance like.
Melting point/freezing point	< -20 °C (OECD 102).
Boiling point or initial boiling point and boiling range	290.4 °C (OECD 103).
Flammability	The substance is not classified as flammable, pyrophoric or emit flammable gases under standard conditions.
Lower explosion limit	Not determined.
Upper explosion limit	Not determined.
Flash point	134 °C (EU method A.9).
Auto-ignition temperature	260 °C (EU method A.15).
Decomposition temperature	Not determined, it is not a self-reactive substance or an organic peroxide or a substance that may decompose.
pH	Not determined.
Kinematic viscosity	Not determined, it is not a hydrocarbon or a chlorinated hydrocarbon.
Solubility	2.68 mg/l (20 °C, pH = 6.59 - 6.69, OECD 105).
Partition coefficient n-octanol/water (log value)	log Pow = 5.6 (30 °C, OECD 117).
Vapour pressure	0.233 Pa (23 °C, OECD 104).
Density and/or relative density	D ₄ ²⁰ = 0.964 (OECD 109).
Relative vapour density	Not determined.
Particle characteristics	Does not apply to liquid.

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Mixture

Explosives

Data for the mixture are not available.

The mixture does not contain substances classified as explosives or oxidising, or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Flammable gases

It is not gas.

Aerosols

It is not aerosol.

Oxidising gases

It is not gas.

Gases under pressure

It is not gas.

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

Flammable liquids

Data for the mixture are not available.

The mixture does not contain substances classified as flammable liquids or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Flammable solids

It is not solid.

Self-reactive substances and mixtures

Data for the mixture are not available.

The mixture does not contain substances classified as self-reactive substances or explosives or organic peroxides or oxidising, or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Pyrophoric liquids

Data for the mixture are not available.

The mixture does not contain substances classified as pyrophoric liquids or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Pyrophoric solids

It is not solid.

Self-heating substances and mixtures

Data for the mixture are not available.

The mixture does not contain substances classified as self-heating or pyrophoric substances or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Substances and mixtures, which emit flammable gases in contact with water

Data for the mixture are not available.

The mixture does not contain substances classified as substances, which emit flammable gases in contact with water or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Oxidising liquids

Data for the mixture are not available.

The mixture does not contain substances classified as oxidising liquids or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Oxidising solids

It is not solid.

Organic peroxides

Data for the mixture are not available.

The mixture does not contain substances classified as organic peroxides or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Corrosive to metals

Data for the mixture are not available.

The mixture is not classified as corrosive to category 1 metals, due to the low content of the substance classified as such and the pH value < 10.

Desensitised explosives

Data for the mixture are not available.

The mixture does not contain substances classified as explosives or desensitised explosives, or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

Sodium etasulfate	CAS: 126-92-1
Explosives	
Data for the substance are not available. The substance does not contain chemical groups associated with explosive properties.	
Flammable gases	
It is not gas.	
Aerosols	
It is not aerosol.	
Oxidising gases	
It is not gas.	
Gases under pressure	
It is not gas.	
Flammable liquids	
It is not liquid.	
Flammable solids	
It is not solid. The substance with bulk density ≥ 400 g/l is not classified as flammable solid. The substance with bulk density < 400 g/l is classified as flammable solid category 1 (EU method A.10).	
Self-reactive substances and mixtures	
Data for the substance are not available. The substance is not classified as self-reactive.	
Pyrophoric liquids	
It is not liquid.	
Pyrophoric solids	
Data for the substance are not available. The substance is stable in air, there is no spontaneous ignition.	
Self-heating substances and mixtures	
Data for the substance are not available. The substance is not classified as self-heating.	
Substances and mixtures, which emit flammable gases in contact with water	
Data for the substance are not available. The chemical structure of the substance does not contain metals or metalloids. The substance is soluble in water and forms a stable mixture with it.	
Oxidising liquids	
It is not liquid.	
Oxidizing solids	
Data for the substance are not available. It is an organic substance does not contain chemical groups associated with oxidising properties.	
Organic peroxides	

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

Data for the substance are not available.

The substance does not contain a bivalent group -O-O- with at least one organic radical.

Corrosive to metals

Data for the substance are not available.

The substance is not classified as corrosive to metal.

Desensitised explosives

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive properties.

N,N-Dimethyldecylamine N-oxide

CAS: 2605-79-0

Explosives

Data for the substance are not available.

The substance contains chemical groups associated with explosive properties, but the calculated oxygen balance is less than -200.

Calculated oxygen balance = - 290.

Flammable gases

It is not gas.

Aerosols

It is not aerosol.

Oxidising gases

It is not gas.

Gases under pressure

It is not gas.

Flammable liquids

It is not liquid.

Flammable solids

The substance is not classified as flammable solid (EU method A.10).

Self-reactive substances and mixtures

Data for the substance are not available.

The substance is not classified as self-reactive.

Pyrophoric liquids

It is not liquid.

Pyrophoric solids

Data for the substance are not available.

The substance is stable in air, there is no spontaneous ignition.

Self-heating substances and mixtures

Data for the substance are not available.

The substance is not classified as self-heating.

Substances and mixtures, which emit flammable gases in contact with water

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

Data for the substance are not available.

The chemical structure of the substance does not contain metals or metalloids.

The substance is soluble in water and forms a stable mixture with it.

Oxidising liquids

It is not liquid.

Oxidizing solids

Data for the substance are not available.

It is an organic substance does not contain chemical groups associated with oxidising properties.

Organic peroxides

Data for the substance are not available.

The substance does not contain a bivalent group -O-O- with at least one organic radical.

Corrosive to metals

Data for the substance are not available.

The substance is not classified as corrosive to metal.

Desensitised explosives

Data for the substance are not available.

The substance is not classified as explosive or desensitised explosive.

Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate

CAS: 51981-21-6

Explosives

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive properties.

Flammable gases

It is not gas.

Aerosols

It is not aerosol.

Oxidising gases

It is not gas.

Gases under pressure

It is not gas.

Flammable liquids

It is not liquid.

Flammable solids

The substance is not classified as flammable solid (UN-N1 test).

Self-reactive substances and mixtures

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive or self-reactive properties.

Pyrophoric liquids

It is not liquid.

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

Pyrophoric solids

The substance is not classified as pyrophoric solid (UN-N2 and N4 test).

Self-heating substances and mixtures

Data for the substance are not available.

The substance is not classified as self-heating.

Substances and mixtures, which emit flammable gases in contact with water

The substance is not classified as substances, which emit flammable gases in contact with water (UN-N5 test).

The substance is soluble in water and forms a stable mixture with it.

Oxidising liquids

It is not liquid.

Oxidizing solids

Data for the substance are not available.

It is an organic substance that does not contain oxygen, fluorine or chlorine, or these elements are chemically bounded only to carbon or hydrogen.

Organic peroxides

Data for the substance are not available.

The substance does not contain a bivalent group -O-O- with at least one organic radical.

Corrosive to metals

Data for the substance are not available.

Aqueous solutions are classified as corrosive to metal category 1.

Desensitised explosives

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive properties.

Reaction mass of 1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,4,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one EC: 915-730-3 and 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one

Explosives

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive properties.

Flammable gases

It is not gas.

Aerosols

It is not aerosol.

Oxidising gases

It is not gas.

Gases under pressure

It is not gas.

Flammable liquids

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

The substance is not classified as flammable liquid according to the value of the flash point and boiling point.

Flammable solids

It is not solid.

Self-reactive substances and mixtures

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive or self-reactive properties.

Pyrophoric liquids

Data for the substance are not available.

The substance is stable in air, there is no spontaneous ignition.

Pyrophoric solids

It is not solid.

Self-heating substances and mixtures

Data for the substance are not available.

The substance is not classified as self-heating.

Substances and mixtures, which emit flammable gases in contact with water

Data for the substance are not available.

The chemical structure of the substance does not contain metals or metalloids.

The substance is miscible with water and forms a stable mixture with it.

Oxidising liquids

Data for the substance are not available.

It is an organic substance that does not contain oxygen, fluorine or chlorine, or these elements are chemically bounded only to carbon or hydrogen.

Oxidizing solids

It is not solid.

Organic peroxides

Data for the substance are not available.

The substance does not contain a bivalent group -O-O- with at least one organic radical.

Corrosive to metals

Data for the substance are not available.

The substance is not classified as corrosive to metal.

Desensitised explosives

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive properties.

9.2.2. Other safety characteristics

Mechanical sensitivity	Not determined, it is not an explosive substance.
Self-accelerating polymerisation temperature	Not determined, it is not a polymerising substance.
Formation of explosible dust/air mixtures	Not determined, it is not a dust.
Acid/alkaline reserve	Not determined, pH is in the range 4 - 10.

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

Evaporation rate	Not determined.
Miscibility	Not determined.
Conductivity	Not determined.
Corrosiveness	Not determined.
Gas group	Not determined, it is not gas.
Redox potential	Not determined.
Radical formation potential	Not determined.
Photocatalytic properties	Not determined.

SECTION 10: Stability and reactivity

10.1. Reactivity

The mixture is stable under normal conditions of use. There aren't any hazardous reaction.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions aren't known under normal conditions of use.

10.4. Conditions to avoid

Protect from frost.

10.5. Incompatible materials

Strong oxidising agents.

10.6. Hazardous decomposition products

They do not form under normal use. Burning releases carbon oxides, nitrogen oxides, ammonia, sulphur oxides, hydrogen sulphide, chlorine oxides, hydrogen chloride and products of incomplete combustion.

SECTION 11: Toxicological information

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

Mixture

Acute toxicity

The mixture is not classified as toxic for all routes of exposure.

Oral Data for the mixture are not available.
The mixture is not classified by the additive formula.
 $ATE_{\text{mixture}} > 3\,333 \text{ mg/kg}$.

Dermal Data for the mixture are not available.
The mixture does not contain relevant substances classified as an acute toxicity by dermal route of exposure or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Inhalation Data for the mixture are not available.
The mixture does not contain relevant substances classified as an acute toxicity by inhalation route of exposure or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

Skin corrosion/irritation

Data for the mixture are not available.

The mixture is not classified as skin irritant based on the general/specific concentration limits of substance(s).

Serious eye damage/irritation

Data for the mixture are not available.

The mixture is classified as causes serious eye damage based on the general/specific concentration limits of substance(s).

Respiratory or skin sensitisation

Data for the mixture are not available.

The mixture is classified as a skin sensitizing in category 1A according to the general/specific concentration limits of substance(s).

The mixture contains other sensitizing substance(s) with an elicitation limit that can cause an allergic reaction.

Germ cell mutagenicity

Data for the mixture are not available.

The mixture does not contain substances classified as mutagenicity or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Carcinogenicity

Data for the mixture are not available.

The mixture does not contain substances classified as carcinogenicity or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Reproductive toxicity

Data for the mixture are not available.

The mixture does not contain substances classified as toxic for reproduction or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

STOT – single exposure

Data for the mixture are not available.

The mixture does not contain substances classified as toxic for specific target organs in a single exposure or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

STOT – repeated exposure

Data for the mixture are not available.

The mixture is not classified as toxic for specific target organs in a repeated exposure according to the general/specific concentration limits of substance(s).

Aspiration hazard

Data for the mixture are not available.

The mixture does not contain substances classified as aspiration hazard or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Other information

See section 2 and 4.

Sodium etasulfate

CAS: 126-92-1

Acute toxicity

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

Oral Based on available data, the classification criteria are not met
LD₅₀ = 2 800 mg/kg (rat, OECD 401).

Dermal Based on available data, the classification criteria are not met.
LD₅₀ > 2 000 mg/kg (read-across (sodium octylsulfate), rabbit, OECD 402).

Inhalation Data for the substance are not available.

Skin corrosion/irritation

The substance classified as skin irritant.

Mean erythema score = 3 (not fully reversible after 14 days) and oedema = 2; 3,3; 3 (not fully reversible after 14 days) (rabbit, 72 hrs., OECD 404).

Serious eye damage/irritation

The substance classified as seriously damaging to the eyes.

Mean score of corneal opacity = 1.33 (not fully reversible after 8 days), iritis = 1.0 (fully reversible after 8 days), conjunctival redness = 1.23 (not fully reversible after 8 days), conjunctival oedema = 0.89 (not fully reversible after 8 days) (rabbit, 72 h, OECD 405).

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

The substance is not classified as skin sensitising (mouse, OECD 429).

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Negative (OECD 471, OECD 473, OECD 476).

Carcinogenicity

Based on available data, the classification criteria are not met.

NOAL > 1 125mg/kg/day (rat, oral, OECD 453).

Reproductive toxicity

Data for the substance are not available.

STOT – single exposure

Data for the substance are not available.

STOT – repeated exposure

Based on available data, the classification criteria are not met.

NOAEL = 488 mg/kg/day (rat, oral, 90 d., OECD 408).

LOAEL = 1 016 mg/kg/day (rat, oral, 90 d., OECD 408).

Aspiration hazard

The substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm²/s or less at 40 °C.

N,N-Dimethyldecylamine N-oxide

CAS: 2605-79-0

Acute toxicity

Oral The substance is classified in category 4.
LD₅₀ > 300 - < 2 000 mg/kg (rat, female).
ATE = 500 mg/kg (for calculation by additive formula).

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

Dermal Based on available data, the classification criteria are not met.
LD₅₀ > 2 000 mg/kg (rat).

Inhalation Data for the substance are not available.

Skin corrosion/irritation

Based on available data, the classification criteria are not met.
Mean erythema score = 1 (fully reversible after 7 days) and oedema = 0 (rabbit, 72 hrs., OECD 404).

Serious eye damage/irritation

The substance is classified as seriously damaging to the eyes.
Mean irritation score = 16.3 (chicken, Hen's Egg Test - Chorioallantoic Membrane (HET-CAM) Test Method).

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.
Not skin sensitising (guinea pig, OECD 406).

Germ cell mutagenicity

Based on available data, the classification criteria are not met.
Negative (OECD 471, EU method B.17, OECD 487).

Carcinogenicity

Data for the substance are not available.

Reproductive toxicity

Based on available data, the classification criteria are not met.
NOAEL = 40 mg/kg/day (rat, oral, generation P0, OECD 422).
NOAEL = 100 mg/kg/day (rat, oral, generation F1, OECD 422).

STOT – single exposure

Data for the substance are not available.

STOT – repeated exposure

Based on available data, the classification criteria are not met.
NOAEL = 88 mg/kg/day (rat, oral, 90 days, OECD 408).

Aspiration hazard

The substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm²/s or less at 40 °C.

Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate

CAS: 51981-21-6

Acute toxicity

Oral Based on available data, the classification criteria are not met.
LD₅₀ > 2 000 mg/kg (rat, EU method B.1).

Dermal Based on available data, the classification criteria are not met.
LD₅₀ > 2 000 mg/kg (rabbit, OECD 402).

Inhalation Based on available data, the classification criteria are not met.
LC₅₀ > 4.2 mg/l (aerosol, rat, 4 hrs, no death is observed).

Skin corrosion/irritation

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

Based on available data, the classification criteria are not met.

Overall irritation score = 0 (rabbit, 72 hrs., OECD 404).

Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Mean score of corneal opacity = 0, iritis = 0, conjunctival redness = 0.11 (fully reversible after 2 days), conjunctival oedema = 0 (rabbit, 72 hrs., OECD 405).

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

Not skin sensitising (guinea pig, OECD 406).

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Negative (OECD 471, OECD 473, OECD 476).

Carcinogenicity

Data for the substance are not available.

Reproductive toxicity

Based on available data, the classification criteria are not met.

NOAEL = 5 000 ppm (increased kidney weight and minimal to slight histopathological renal changes, rat, oral, generation P0, OECD 416).

NOAEL \geq 15 000 ppm (rat, oral, generation F1, OECD 416).

STOT – single exposure

Data for the substance are not available.

STOT – repeated exposure

Based on available data, the classification criteria are not met.

NOAEL = 300 mg/kg/day (haematology; clinical chemistry; urinalysis; organ weights, rat, oral, 90 d., OECD 408).

Aspiration hazard

The substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm²/s or less at 40 °C.

Reaction mass of 1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,4,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one EC: 915-730-3 and 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one

Acute toxicity

Oral Based on available data, the classification criteria are not met.

LD₅₀ > 5 000 mg/kg (rat).

Dermal Based on available data, the classification criteria are not met.

LD₅₀ > 5 000 mg/kg (rat).

Inhalation Data for the substance are not available.

Skin corrosion/irritation

Classified as irritating to the skin - mean tissue viability is 55 % (OECD 439).

Serious eye damage/irritation

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

Based on available data, the classification criteria are not met.
No effect on the eye (Q)SAR method.

Respiratory or skin sensitisation

Skin sensitising category 1B (mouse, OECD 429).

Germ cell mutagenicity

Based on available data, the classification criteria are not met.
Negative (OECD 471, OECD 473, OECD 476).

Carcinogenicity

Data for the substance are not available.

Reproductive toxicity

Data for the substance are not available.

STOT – single exposure

Data for the substance are not available.

STOT – repeated exposure

Based on available data, the classification criteria are not met.
NOAEL = 120 mg/kg/day (hematology, clinical biochemistry, ratio of organ weight to body weight, histopathology: neoplastic, oral, rat, 90 d, OECD 408).

Aspiration hazard

The substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm²/s or less at 40 °C.

11.2. Information on other hazards

Mixture does not contain substance(s) meeting the criteria for persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) in accordance with Annex XIII of REACH regulation. The mixture and its substances are not mentioned on the Candidate list for possible inclusion in Annex XIV of REACH at the date of the revision of the safety data sheet and given in the list (established in accordance with Article 59(1) for having endocrine disrupting properties of REACH regulation. Mixture does not contain the substance(s) identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. There is no other relevant information on adverse health effects that is not required according to the classification criteria set out in CLP Regulation. .

SECTION 12: Ecological information

12.1. Toxicity

Mixture

Data for the mixture are not available.

Acute aquatic toxicity

The mixture is not classified as acute aquatic toxicity based on calculation according to the summation method.

category 1

$\sum < 5.35$

Chronic aquatic toxicity

The mixture is classified as Aquatic Chronic 3; H412 based on calculation according to the summation method.

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

category	1	2	3	4
Σ	1.35	18.5	< 185	not relevant
Sodium etasulfate				CAS: 126-92-1
The substance is not classified as hazardous for the aquatic environment.				
Fish				
LC ₅₀ , 96 hrs., Danio rerio: > 100 mg/l (read-across (sodium octylsulfate), mortality, OECD 203). NOEC, 42 d., Pimephales promelas: ≥ 1 357 mg/l (mortality).				
Crustaceans				
EC ₅₀ , 48 hrs., Daphnia Magna: 483 mg/l (mobility, EU method C.2). NOEC, 21 d., Daphnia Magna: 1.4 mg/l (reproduction, OECD 211).				
Algae				
EC ₅₀ , 72 hrs., Desmodesmus subspicatus: > 511 mg/l (growth rate, EU method C.3). EC ₅₀ , 72 hrs., Desmodesmus subspicatus: 511 mg/l (biomass, EU method C.3). EC ₁₀ , 72 hrs., Desmodesmus subspicatus: 199 mg/l (growth rate, EU method C.3). EC ₁₀ , 72 hrs., Desmodesmus subspicatus: 133 mg/l (biomass, EU method C.3). NOEC, 72 hrs, Desmodesmus subspicatus: 103 mg/l (biomass, EU method C.3).				
N,N-Dimethyldecylamine N-oxide				CAS: 2605-79-0
The substance is classified as Aquatic Acute 1; H400 (M = 1) and Aquatic Chronic 2; H411.				
Fish				
LC ₅₀ , 96 hrs., Danio rerio: 31.8 mg/l (mortality). NOEC, 15 d., Pimephales promelas: 0.495 mg/l (survival and mean length).				
Crustaceans				
EC ₅₀ , 48 hrs., Daphnia Magna: 2.9 mg/l (mobility). NOEC, 21 d., Daphnia Magna: 0.7 mg/l.				
Algae				
EC ₅₀ , 72 hrs, Pseudokirchneriella subcapitata: 0.205 mg/l (biomass). EC ₅₀ , 72 hrs, Pseudokirchneriella subcapitata: 0.266 mg/l (growth rate). NOEC, 72 hrs, Pseudokirchneriella subcapitata: 0.078 mg/l (growth rate).				
Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate				CAS: 51981-21-6
The substance is not classified as hazardous for the aquatic environment.				
Fish				
LC ₅₀ , 96 hrs., Oncorhynchus mykiss: > 95.26 mg/l (mortality, OECD 203). NOEC, 9 d., Brachydanio rerio: 94.55 mg/l (number hatched, OECD 212).				
Crustaceans				
EC ₅₀ , 48 hrs., Daphnia Magna: > 95.26 mg/l (mobility, OECD 202). NOEC, 21 d., Daphnia Magna: ≥ 248.4 mg/l (reproduction, OECD 211).				
Algae				
EC ₅₀ , 72 hrs., Desmodesmus subspicatus: ≥ 94.99 mg/l (OECD 201).				

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

Reaction mass of 1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,4,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one EC: 915-730-3 and 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	
The substance is classified as Aquatic Chronic 1; H410 (M=1).	
Fish	
LC ₅₀ , 96 hrs., Lepomis macrochirus: 1.3 mg/l (mortality). NOEC, 30 d., Danio rerio: 0.16 mg/l (length and weight). NOEC, 30 d., Danio rerio: 0.3 mg/l (survival after hatching). NOEC, 30 d., Danio rerio: 0.54 mg/l (egg survival, hatching time).	
Crustaceans	
EC ₅₀ , 48 hrs., Daphnia Magna: 1.38 mg/l (mobility). NOEC, 21 d., Daphnia Magna: 0.028 mg/l (reproduction). NOEC, 21 d., Daphnia Magna: 0.096 mg/l (length). NOEC, 21 d., Daphnia Magna: 0.448 mg/l (mortality).	
Algae	
EC ₅₀ , 72 hrs., Desmodesmus subspicatus: > 2.6 mg/l (growth rate). EC ₅₀ , 72 hrs., Desmodesmus subspicatus: > 2.6 mg/l (biomass). NOEC, 72 hrs., Desmodesmus subspicatus: ≥ 2.6 mg/l (growth rate).	
12.2. Persistence and degradability	
Mixture	
Data for the mixture are not available.	
Sodium etasulfate	CAS: 126-92-1
Readily biodegradable: 89.3 % after 28 days (CO ₂ evolution, OECD 301 B).	
N,N-Dimethyldecylamine N-oxide	CAS: 2605-79-0
Readily biodegradable: 97 % after 28 days (removal of dissolved organic carbon, OECD 301 E).	
Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate	CAS: 51981-21-6
Readily biodegradable: 76 % after 28 days (O ₂ consumption, OECD 301 D).	
Reaction mass of 1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,4,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one EC: 915-730-3 and 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	
Not readily biodegradable: 0% after 28 days (O ₂ consumption, OECD 301 C).	
12.3. Bioaccumulative potential	
Mixture	
Data for the mixture are not available.	
Sodium etasulfate	CAS: 126-92-1
log Pow = -0.248 (25 °C, pH = 8.97 – 8.98, OECD 123).	
N,N-Dimethyldecylamine N-oxide	CAS: 2605-79-0
log Pow = 0.95 (calculation).	
Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate	CAS: 51981-21-6

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

log Pow < 0 (27 °C, pH = 7, OECD 117).	
Reaction mass of 1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,4,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one EC: 915-730-3 and 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	
BCF = 600 (Lepomis macrochirus, OECD 305). log Pow = 5.6 (30 °C, OECD 117).	
12.4. Mobility in soil	
Mixture	
Data for the mixture are not available.	
Sodium etasulfate	CAS: 126-92-1
log Koc > 1.88 - < 2 (25 °C).	
N,N-Dimethyldecylamine N-oxide	CAS: 2605-79-0
Koc = 307 - > 2 113 (by kind of soil, 23.6 °C).	
Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate	CAS: 51981-21-6
log Koc < 1.45 (OECD 121).	
Reaction mass of 1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,4,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one EC: 915-730-3 and 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	
log Koc = 4.12.	
12.5. Results of PBT and vPvB assessment	
Mixture does not contain substance(s) meeting the criteria for persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) in accordance with Annex XIII of REACH Regulation. The mixture and its substances are not mentioned on the Candidate list for possible inclusion in Annex XIV of REACH at the date of the revision of the safety data sheet (established in accordance with Article 59(1) of REACH Regulation.	
12.6. Endocrine disrupting properties	
The mixture and its substances are not mentioned on the Candidate list for possible inclusion in Annex XIV of REACH at the date of the revision of the safety data sheet (established in accordance with Article 59(1) of REACH Regulation. Mixture does not contain the substance(s) identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.	
12.7. Other adverse effects	
Data are not available.	
SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
<i>Disposal methods of the substance or mixture and the contaminated packaging</i>	

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

Dispose according to the applicable European and local regulations (eg. in a hazardous waste incinerator). Do not empty unused product into drainage systems. Do not contaminate ponds or ditches with the product or used container. Hand over the residual amounts and solutions to a licensed disposal company.

Hand over the remaining quantities and unregenerate solutions to an authorized person (specialized company with authorization) or to the collection yard in the hazardous waste section according to the worker's instructions. Empty, cleaned packaging can be stored at a landfill of the appropriate category or **in the sorted waste**.

Possible waste code

16 03 05* - organic wastes containing hazardous substances or 20 01 29* - detergents containing hazardous substances (mixture), 15 01 10* - packaging containing residues of or contaminated by hazardous substances (contaminated packaging), 15 01 02 - plastic packaging (clear packaging)

Physical/chemical properties that may affect waste treatment options

Not known.

Special precautions recommended for waste management

Not known.

Waste legislation

Directive 2008/98/EC on waste and repealing certain Directives, as amended.

SECTION 14: Transport information

This product is not classified as a dangerous for transportation (ADR/RID, IMDG, ICAO/IATA).

14.1. UN number or ID number

Not given.

14.2. UN proper shipping name

Not given.

14.3. Transport hazard class(es)

Not given.

14.4. Packing group

Not given.

14.5. Environmental hazards

It is not dangerous for the environment during transport.

14.6. Special precautions for user

Not given.

14.7. Maritime transport in bulk according to IMO instruments

Not available.

SECTION 15: Regulatory information

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

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

Regulation No. 1907/2006/EC, concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals, as amended (REACH)

Regulation No. 1272/2008/EC, on Classification, Labelling and Packaging of substances and mixtures, as amended (CLP)

Regulation No. 648/2004/EC on detergents, as amended

15.2. Chemical safety assessment

It was not done for the mixture.

SECTION 16: Other information

Reason for the revision of the safety data sheet

Change of the classification and labeling of the mixture. Change in the composition of the mixture in section 3 and related changes in the other sections. The values in sections 8, 9, 11 and 12 are added according to the registration dossier of compounds. Change in section 14.

Key or legend to abbreviations and acronyms

Acute Tox. 2	Acute toxicity, cat. 2
Acute Tox. 3	Acute toxicity, cat. 3
Acute Tox. 4	Acute toxicity, cat. 4
Aquatic Acute 1	Acute aquatic hazard, cat. 1
Aquatic Chronic 1	Chronic aquatic hazard, cat. 1
Aquatic Chronic 2	Chronic aquatic hazard, cat. 2
Aquatic Chronic 3	Chronic aquatic hazard, cat. 3
Eye Dam. 1	Serious eye damage, cat. 1
Eye Irrit. 2	Eye irritation, cat. 2
Met. Corr. 1	Substance or mixture corrosive to metals, cat. 1
Skin Corr. 1C	Skin corrosion, cat. 1C
Skin Irrit. 2	Skin irritation, cat. 2
Skin Sens. 1A	Skin sensitization, cat. 1A
Skin Sens. 1B	Skin sensitization, cat. 1B
STOT RE 2	Specific target organ toxicity - repeated exposure, cat. 2
M	Multiplying factor
ADR	Accord Dangereuses Route
CLP	Regulation No. 1272/2008/EC, on Classification, Labelling and Packaging of substances and mixtures
DNEL	Derived No Effect Level
ICAO/IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
PBT	Persistent, bioaccumulative, toxic substance
PNEC	Predicted No Effect Concentration
REACH	Regulation No. 1907/2006/EC, concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

RID	Regulation concerning the International Carriage of Dangerous Goods by Rail
STOT	Specific target organ toxicity
vPvB	Very persistent and very bioaccumulative substance

Sources of key data used to compile the Safety Data Sheet

European legislation, manufacturer's safety data sheet, registration dossier of substances.

List of H- and P- phrases

EUH071	Corrosive to the respiratory tract.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
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.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water and soap
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P501	Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Dispose of the cleaned packaging without any residual product content in the sorted waste.

Training advice

According to SDS.

Other information

Classification according to data from the manufacturer. The mixture is classified using calculation methods according to Regulation CLP and tests. Use only for the purposes designated by the manufacturer, will prevent health and environmental risks.

SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN 147

The information in this SDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

The safety data sheet is created in accordance with Regulation No. 2020/878/EC. There is no additional information in accordance with the local and national legislation of the Member State in the European Union, in the safety data sheet.

The safety data sheet was created by company LACHEPRA s.r.o.