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

1.1. PRODUCT IDENTIFIER

Product name	Wolf Flow Emulsifier
Product number	7197/23294
UFI	UFI: MVWM-007J-600Q-TKGS

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

Identified uses	Detergent. Cleaning agent.

1.3. Details of the supplier of the safety data sheet

Supplier	Wolf Laundry Ltd Unit 5B, Ashroyd Business Park, Platts Common, Barnsley South Yorkshire S74 9SB Tel: 0808 500 8043 info@wolflaundry.co.uk

1.4. Emergency telephone number

Emergency telephone	Wolf Laundry Ltd: Tel: 0808 500 8043 (Mon - Fri 8am-6pm)
National emergency telephone number	NHS Direct 111 (GB) National Poisons Information Service Tel: +44 344 892 0111 (UK) - Medical Professionals Only National Poisons Information Centre Tel: +353 (01) 809 2566 (Ireland) - Healthcare Professionals only (24 hour service)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards	Not Classified
Health hazards	Eye Dam. 1 - H318
Environmental hazards	Aquatic Chronic 3 - H412

2.2. Label elements

Hazard pictograms

Signal word	Danger
Hazard statements	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. 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. P501 Dispose of contents/ container in accordance with national regulations.
Contains	Alcohols, C13-15, branched and linear, ethoxylated

Detergent labelling	15 - < 30% non-ionic surfactants, 5 - < 15% aliphatic hydrocarbons, < 5% optical brighteners, < 5% perfumes

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

PEG-5 C13 Oxo Alcohol — 15-30%

CAS number: 69011-36-5 EC number: 931-138-8

Classification
Eye Irrit. 2 - H319
Aquatic Chronic 3 - H412

Alcohols, C13-15, branched and linear, ethoxylated — 10-15%

CAS number: 157627-86-6 EC number: 931-954-4

Classification
Acute Tox. 4 - H302
Eye Dam. 1 - H318
Aquatic Chronic 3 - H412

2,2'-OXYBISETHANOL — 5-10%

CAS number: 111-46-6 EC number: 203-872-2

Classification
Acute Tox. 4 - H302
STOT RE 2 - H373

ETHANOL — 3-5%

CAS number: 64-17-5 EC number: 200-578-6

Classification
Flam. Liq. 2 - H225

METHANOL — <1%

CAS number: 67-56-1 EC number: 200-659-6

Classification
Flam. Liq. 2 - H225
Acute Tox. 3 - H301
Acute Tox. 3 - H311
Acute Tox. 3 - H331
STOT SE 1 - H370

d-LIMONENE — 0.0046%

CAS number: 5989-27-5 EC number: 227-813-5

M factor (Acute) = 1 M factor (Chronic) = 1

Classification
Flam. Liq. 3 - H226
Skin Irrit. 2 - H315
Skin Sens. 1 - H317
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

a-hexylcinnamaldehyde	0.0046%
CAS number: 101-86-0	EC number: 202-983-3
M factor (Acute) = 1	

Classification
Skin Sens. 1B - H317
Aquatic Acute 1 - H400
Aquatic Chronic 2 - H411

Linalool	0.0028%
CAS number: 78-70-6	EC number: 201-134-4

Classification
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Skin Sens. 1B - H317

Alpha-IsoMethyl Ionone	0.0011%
CAS number: 127-51-5	EC number: 204-846-3

Classification
Skin Sens. 1B - H317
Aquatic Chronic 2 - H411

Diethyl phthalate	<1%
CAS number: 84-66-2	EC number: 201-550-6

Classification
Not Classified

CITRAL	0.0004%
CAS number: 5392-40-5	EC number: 226-394-6

Classification
Skin Irrit. 2 - H315
Skin Sens. 1 - H317

GERANIOL	0.0002%
CAS number: 106-24-1	EC number: 203-377-1

Classification
Skin Irrit. 2 - H315
Eye Dam. 1 - H318
Skin Sens. 1 - H317

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information: Get medical attention if symptoms are severe or persist. Remove affected person from source of contamination.

Inhalation: Unlikely route of exposure as the product does not contain volatile substances. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Promptly get affectedperson to drink large volumes of water to dilute the swallowed chemical. Give milk instead of water if readily available. Get medical attention immediately.
Skin contact	Wash skin thoroughly with soap and water. Remove contaminated clothing. Get medical attention promptly if symptoms occur after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Spray/mists may cause respiratory tract irritation. This is unlikely to occur but symptoms similar to those of ingestion may develop.
Ingestion	May cause stomach pain or vomiting.
Skin contact	May cause skin irritation.
Eye contact	Severe irritation, burning and tearing.

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

Notes for the doctor	Treat symptomatically.

SECTION 5: Fire fighting measures

5.1. Extinguishing media

Suitable extinguishing media	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	No unusual fire or explosion hazards noted.
Hazardous combustion products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting	Dangerous for the environment if discharged into watercourses. If risk of water pollution occurs, notify appropriate authorities. Control run-off water by containing and keeping it out of sewers and watercourses.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions	Dangerous for the environment if discharged into watercourses. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Absorb in vermiculite, dry sand or earth and place into containers. Flush spilled material into suitable retaining areas or container with large quantities of water. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of contents/container in accordance with national regulations.

6.4. Reference to other sections

Reference to other sections	Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additionalinformation on health hazards. See Section 12 for additional information on ecological hazards. hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Avoid contact with skin and eyes. Keep container tightly sealed when not in use.
Advice on general occupational hygiene	Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Keep above the chemical's freezing point to avoid rupturing the container. Keep container tightly closed.
Storage class	Chemical storage.

7.3. Specific end use(s)

Specific end use(s)	The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure control/Personal protection

8.1. Control parameters

Occupational exposure limits

2,2'-OXYBISETHANOL

Long-term exposure limit (8-hour TWA): WEL 23 ppm 101 mg/m³

ETHANOL

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 mg/m³

METHANOL

Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m³
Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m³
Sk

Diethyl phthalate

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³
Short-term exposure limit (15-minute): WEL 10 mg/m³

WEL = Workplace Exposure Limit.
Sk = Can be absorbed through the skin.

PEG-5 C13 Oxo Alcohol (CAS: 69011-36-5)

DNEL	Workers - Inhalation; Long term systemic effects: 294 mg/m³ Consumer - Dermal; Long term systemic effects: 1250 mg/kg Consumer - Oral; Long term systemic effects: 25 mg/kg Workers - Dermal; Long term systemic effects: 2080 mg/kg Consumer - Inhalation; Long term systemic effects: 87 mg/m³
PNEC	Sediment (Freshwater); 0.604 mg/kg Soil; 0.1 mg/kg Sediment (Marinewater); 0.0604 mg/kg Fresh water; 0.074 mg/l Intermittent release; 0.015 mg/l marine water; 0.0074 mg/l STP; 1.4 mg/l

2,2'-OXYBISETHANOL (CAS: 111-46-6)

DNEL	Industry - Dermal; Long term : 106 mg/kg/day Industry - Inhalation; Long term : 60 mg/m³
PNEC	Fresh water; 10 mg/l marine water; Long term 1 mg/l Sediment; Long term 20.9 mg/kg Soil; Long term 1.53 mg/kg STP; Long term 10 mg/l

ETHANOL (CAS: 64-17-5)

DNEL	Industry - Inhalation; Short term local effects: 1900 mg/m³ Industry - Dermal; Long term systemic effects: 343 mg/kg/day Industry - Inhalation; Long term systemic effects: 950 mg/m³ Consumer - Inhalation; Short term local effects: 950 mg/m³ Consumer - Dermal; Long term systemic effects: 206 mg/kg/day Consumer - Inhalation; Long term systemic effects: 114 mg/m³ Consumer - Oral; Long term systemic effects: 87 mg/kg/day
PNEC	Industry - Fresh water; Long term 0.96 mg/l Industry - marine water; Long term 0.79 mg/l Industry - Intermittent release; Long term 2.75 mg/l Industry - STP; Long term 580 mg/l Industry - Sediment (Freshwater); Long term 3.6 mg/kg Industry - Sediment (Marinewater); Long term 2.9 mg/kg Industry - Soil; Long term 0.63 mg/kg

METHANOL (CAS: 67-56-1)

DNEL	Industry - Dermal; Short term systemic effects: 40 mg/kg/day Industry - Inhalation; Short term systemic effects: 260 mg/m³ Industry - Dermal; Long term systemic effects: 40 mg/kg/day Industry - Inhalation; Long term systemic effects: 260 mg/m³ Consumer - Dermal; Short term systemic effects: 8 mg/kg/day Consumer - Inhalation; Short term systemic effects: 50 mg/m³ Consumer - Oral; Short term systemic effects: 8 mg/kg/day Consumer - Dermal; Long term systemic effects: 8 mg/kg/day Consumer - Inhalation; Long term systemic effects: 50 mg/m³
PNEC	Industry - Fresh water; Long term 20.8 mg/l Industry - marine water; Long term 2.08 mg/l Industry - Intermittent release; Long term 1540 mg/l Industry - STP; Long term 100 mg/l Industry - Sediment (Freshwater); Long term 77 mg/kg

a-hexylcinnamaldehyde (CAS: 101-86-0)

DNEL	Workers - Inhalation; Long term systemic effects: 0.078 mg/m³ Workers - Inhalation; Short term local effects: 6.28 mg/m³ Workers - Dermal; Long term systemic effects: 18.2 mg/kg bw/day Workers - Dermal; Long term local effects: 0.525 mg/cm² Consumer - Inhalation; Long term systemic effects: 0.019 mg/m³ Consumer - Inhalation; Short term local effects: 4.71 mg/m³ Consumer - Dermal; Long term systemic effects: 9.11 mg/kg bw/day Consumer - Dermal; Long term local effects: 0.0787 mg/cm² Consumer - Dermal; Short term local effects: 0.0787 mg/cm² Consumer - Oral; Long term systemic effects: 0.056 mg/kg bw/day
PNEC	Fresh water; 0.00126 mg/l marine water; 0.000126 mg/l STP; 10 mg/l Sediment (Freshwater); 3.2 mg/kg dwt Sediment (Marinewater); 0.064 mg/kg dwt Soil; 9.51 mg/kg dwt

Tetrahydro Linalool (CAS: 78-69-3)

DNEL	Workers - Inhalation; Long term systemic effects: 2.75 mg/m³ Workers - Dermal; Long term systemic effects: 2.5 mg/kg bw/day Workers - Dermal; Short term local effects: 2.76 mg/cm² Consumer - Inhalation; Long term systemic effects: 0.68 mg/m³ Consumer - Oral; Long term systemic effects: 0.2 mg/kg bw/day Consumer - Dermal; Long term systemic effects: 1.25 mg/kg bw/day Consumer - Dermal; Short term local effects: 2.76 mg/cm²
PNEC	Fresh water; 0.0089 mg/l marine water; 0.00089 mg/l STP; 450 mg/l Sediment (Freshwater); 0.0821 mg/kg Sediment (Marinewater); 0.00821 mg/kg Soil; 0.0112 mg/kg

GERANIOL (CAS: 106-24-1)

DNEL	Workers - Inhalation; Long term systemic effects: 161.6 mg/m³ Workers - Dermal; Long term systemic effects: 12.5 mg/kg Consumer - Oral; Long term systemic effects: 13.75 mg/kg Consumer - Inhalation; Long term systemic effects: 47.8 mg/m³ Consumer - Dermal; Long term systemic effects: 7.5 mg/kg

8.2. Exposure controls

Protective equipment

Appropriate engineering controls	No specific ventilation requirements.
Eye/face protection	Safety glasses with side-shields (EN 166).
Hand protection	Chemical resistant PVC/Nitrilrubber gloves (to European standard EN 374 or equivalent). Thickness: 0,4 mm. Penetration time: >480 min (level 6). The selection of specific gloves for a specific application and time of use in a working area, should also take into account other factors on the working space, such as (but not limited to): other chemicals that are possibly used, physical requirements (protection against cutting/drilling, skill, thermal protection), and the instructions/specification of the supplier of gloves.
Other skin and body protection	Wear suitable protective clothing (EN14605)
Hygiene measures	Do not eat, drink or smoke when using this product.
Respiratory protection	Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Blue-green.
Odour	Mild (or faint).
pH	pH (concentrated solution): 6-8
Relative density	~ 0.985 @ 20°C
Solubility(ies)	Soluble in water.

9.2. Other information

Other information	Not determined.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No potentially hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid	Avoid contact with Oxidising agents. Reducing agents.

10.5. Incompatible materials

Materials to avoid	Strong oxidising agents. Strong reducing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

SECTION 11: Toxiclogical information

11.1. Information on toxicological effects

Toxicological effects	Not regarded as a health hazard under current legislation.

Acute toxicity - oral

Notes (oral LD_{50})	Based on available data the classification criteria are not met.
ATE oral (mg/kg)	4,761.9

Acute toxicity - dermal

Notes (dermal LD_{50})	Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC_{50})	Based on available data the classification criteria are not met.

Skin corrosion/irritation

Skin corrosion/irritation	May cause skin irritation.
Animal data	Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation	Causes serious eye damage.

Respiratory sensitisation

Respiratory sensitisation	Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation	Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro	Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.

Reproductive toxicity

Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard	Based on available data the classification criteria are not met.

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Spray/mists may cause respiratory tract irritation. This is unlikely to occur but symptoms similar to those of ingestion may develop.
Ingestion	Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.
Skin contact	Irritating to skin.
Eye contact	Risk of serious damage to eyes. Symptoms following overexposure may include the following: Redness. Pain.
Acute and chronic health hazards	This product may cause skin and eye irritation. Repeated exposure may cause chronic eye irritation. Mild dermatitis, allergic skin rash.
Route of exposure	Skin and/or eye contact Ingestion

Toxicological information on ingredients.

PEG-5 C13 Oxo Alcohol

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	5,001.0
Species	Rat
ATE oral (mg/kg)	5,001.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	2,001.0
Species	Rat
ATE dermal (mg/kg)	2,001.0

Alcohols, C13-15, branched and linear, ethoxylated

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	1,150.0
Species	Rat
ATE oral (mg/kg)	500.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	2,001.0
Species	Rat
ATE dermal (mg/kg)	2,001.0

ETHANOL

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	10,470.0
Species	Rat
ATE oral (mg/kg)	10,470.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	17,100.0
Species	Rabbit
ATE dermal (mg/kg)	17,100.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	124.7
Species	Rat
ATE inhalation (vapours mg/l)	124.7

Bis-(triazinylamino)-stilbene disulfonic acid derivative (R0130)

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	5,001.0
Species	Rat

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	2,001.0
Species	Rabbit
ATE dermal (mg/kg)	2,001.0

METHANOL

Acute toxicity - oral

ATE oral (mg/kg)	100.0

Acute toxicity - dermal

ATE dermal (mg/kg)	300.0

Acute toxicity - inhalation

ATE inhalation (vapours mg/l)	3.0

Specific target organ toxicity - single exposure

STOT - single exposure	LOAEL 2000 mg/kg, Oral, Rat

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	NOAEC 0.13 mg/l/6hr/day, Inhalation, Rat

2,6-Dimethyl-7-octen-2-ol

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	3,600.0
Species	Rat

ATE oral (mg/kg)	3,600.0

4-tertiary-butyl-cyclohexyl-acetate

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	5,000.0
Species	Rat
ATE oral (mg/kg)	5,000.0
Acute toxicity - dermal	
Acute toxicity dermal (LD_{50} mg/kg)	5,001.0
Species	Rabbit
ATE dermal (mg/kg)	5,001.0

d-LIMONENE

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	4,400.0
Species	Rat
Acute toxicity - dermal	
Acute toxicity dermal (LD_{50} mg/kg)	5,001.0
Species	Rabbit
Carcinogenicity	
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.

a-hexylcinnamaldehyde

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	3,100.0
Species	Rat
Acute toxicity - dermal	
Acute toxicity dermal (LD_{50} mg/kg)	3,001.0
Species	Rabbit
ATE dermal (mg/kg)	3,001.0

Linalool

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	2,790.0
Species	Rat
ATE oral (mg/kg)	2,790.0

Allyl Amyl Glycolate

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	302.0
ATE oral (mg/kg)	500.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	1,105.0
ATE dermal (mg/kg)	1,100.0

Tetrahydro Linalool

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	5,001.0
Species	Rat

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	5,001.0
Species	Rabbit

2,4-Dimethylcyclohex-3-ene-1-carbaldehyde

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	3,900.0
Species	Rat

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	5,000.0
Species	Rabbit
ATE dermal (mg/kg)	5,000.0

Camphor

Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l)	1.5

Dodecanal

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	23,101.0
Species	Rat
ATE oral (mg/kg)	23,101.0

GERANIOL

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	3,600.0

Species	Rat

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	5,001.0
Species	Rabbit

DAMASCONE (DELTA)

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	1,400.0
Species	Mouse
ATE oral (mg/kg)	500.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	5,001.0
Species	Rabbit

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	NOAEL 30 mg/kg, Oral, Rat

SECTION 12: Ecological information

Ecotoxicity	Dangerous for the environment if discharged into watercourses. Harmful to aquatic life with long lasting effects.

12.1. Toxicity

Toxicity	Not considered toxic to fish.

Ecological information on ingredients.

PEG-5 C13 Oxo Alcohol

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: >1-10 mg/l, Leuciscus idus (Golden orfe)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: >1-10 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: 1-10 mg/l, Scenedesmus subspicatus EC10, 72 hours: >0.1-1 mg/l, Skeletonema costatum
Acute toxicity - microorganisms	EC10, 17 hours: >2500 mg/l, Activated sludge

Alcohols, C13-15, branched and linear, ethoxylated

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: >1-10 mg/l, Brachydanio rerio (Zebra Fish)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: >1-10 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: >1-10 mg/l, Scenedesmus subspicatus
Acute toxicity - microorganisms	EC10, : >1000 mg/l, Activated sludge

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates	NOEC, 21 days: >0.1-1 mg/l, Daphnia magna

ETHANOL

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 13000 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	LC_{50}, 48 hours: 12340 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 48 hours: 12900 mg/l, Selenastrum capricornutum
Acute toxicity - microorganisms	EC_{50}, 4 hours: 5800 mg/l, Activated sludge

Chronic aquatic toxicity

Chronic toxicity - fish early life stage	NOEC, 24 days: >0.08 mg/l, Pimephales promelas (Fat-head Minnow)
Chronic toxicity - aquatic invertebrates	NOEC, 10 days: 9.6 mg/l, Daphnia magna

Bis-(triazinylamino)-stilbene disulfonic acid derivative (R0130)

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: >100 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: >100 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC_{50}, 72 hours: >100 mg/l, Algae
Acute toxicity - microorganisms	EC_{50}, : >100 mg/l, Activated sludge

METHANOL

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 15400 mg/l, Lepomis macrochirus (Bluegill)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: >1000 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 96 hours: 22000 mg/l, Selenastrum capricornutum

d-LIMONENE

Acute aquatic toxicity

$LE(C)_{50}$	0.1 < L(E)C50 ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC_{50}, 96 hours: 0.7 mg/l, Pimephales promelas (Fat-head Minnow) LC_{50}, 96 hours: 0.8 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 0.4 mg/l, Daphnia magna EC_{50}, 48 hours: 69.6 mg/l, Daphnia
Acute toxicity - aquatic plants	NOEC, 96 hours: 4 mg/l, ErC50, 72 hours: 8 mg/l, Desmodesmus subspicatus NOEC, 72 hours: 2.62 mg/l, Desmodesmus subspicatus

Chronic aquatic toxicity

M factor (Chronic)	1
Chronic toxicity - aquatic invertebrates	NOEC, 16 days: estimated 0.115 mg/l, Daphnia magna

a-hexylcinnamaldehyde

Acute aquatic toxicity

$LE(C)_{50}$	0.1 < L(E)C50 ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC_{50}, 96 hours: 1.7 mg/l, Fish LC_{50}, 96 hours: 3.1 mg/l, Brachydanio rerio (Zebra Fish)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 3.86 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: 6.87 mg/l, Pseudokirchneriella subcapitata

Cedr-8-enyl Methyl Ketone (Acetyl Cedrene)

Acute aquatic toxicity

$LE(C)_{50}$	0.1 < L(E)C50 ≤ 1
M factor (Acute)	1

Chronic aquatic toxicity

M factor (Chronic)	1

Allyl Amyl Glycolate

Acute aquatic toxicity

$LE(C)_{50}$	0.1 < L(E)C50 ≤ 1
M factor (Acute)	1

2,4-Dimethylcyclohex-3-ene-1-carbaldehyde

Acute aquatic toxicity

Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 76 mg/l, Daphnia

Oxacyclohexadecen-2-one

Acute aquatic toxicity

$LE(C)_{50}$	0.1 < L(E)C50 ≤ 1
M factor (Acute)	1

Chronic aquatic toxicity

M factor (Chronic)	1

GERANIOL

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 14 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 10.8 mg/l, Daphnia
Acute toxicity - aquatic plants	EC_{50}, 72 hours: 13.1 mg/l, Algae

DAMASCONE (DELTA)

Acute aquatic toxicity

$LE(C)_{50}$	0.1 < L(E)C50 ≤ 1
M factor (Acute)	1

Acute toxicity - fish	LC_{50}, 96 hours: 0.97 mg/l, Oryzias latipes (Red killifish)
Acute toxicity - aquatic plants	ErC50, 72 hours: 4.54 mg/l, Pseudokirchneriella subcapitata NOEC, 72 hours: 0.883 mg/l, Pseudokirchneriella subcapitata
Chronic aquatic toxicity	
M factor (Chronic)	1

12.2. Persistence and degradability

Persistence and degradability: The surfactant(s) contained in this product complies(comply) with the biodegradability criteria as laid down in The Detergents Regulations (as amended).

Ecological information on ingredients.

PEG-5 C13 Oxo Alcohol

Chemical oxygen demand	~ 2438 mg/g

Alcohols, C13-15, branched and linear, ethoxylated

Biodegradation	OECD 301B - Degradation >60%: OECD 303A - Degradation >=90%:
Chemical oxygen demand	2430 mg/g

ETHANOL

Persistence and degradability	The product is biodegradable.
Biological oxygen demand	1000 mg/g
Chemical oxygen demand	1900 mg/g

METHANOL

Persistence and degradability	The product is readily biodegradable.

4-tertiary-butyl-cyclohexyl-acetate

Persistence and degradability	Readily biodegradable.
Biodegradation	- Degradation 75%:

d-LIMONENE

Persistence and degradability	Not readily biodegradable.

a-hexylcinnamaldehyde

Persistence and degradability	Readily biodegradable.
Biodegradation	- 97%: 28 days

Tetrahydro Linalool

Persistence and degradability	Readily biodegradable.
Biodegradation	Directive 67/548/EEC Annex V, C.4.C - Degradation 64%: Directive 67/548/EEC Annex V, C.4.B - Degradation 100%: Directive 67/548/EEC Annex V, C.4.F - Degradation >60%:

GERANIOL

Persistence and degradability	Readily biodegradable.

Biodegradation	- 82%: 28 days

12.3. Bioaccumulative potential

Bioaccumulative potential	The product does not contain any substances expected to be bioaccumulating.

Ecological information on ingredients.

ETHANOL

Partition coefficient	log Pow: -0.35

METHANOL

Partition coefficient	log Pow: -0.8

d-LIMONENE

Partition coefficient	log Kow: 2.78-5.03

a-hexylcinnamaldehyde

Partition coefficient	log Pow: 5.3

Tetrahydro Linalool

Partition coefficient	log Pow: 3.3

2,4-Dimethylcyclohex-3-ene-1-carbaldehyde

Partition coefficient	log Pow: 2.34

GERANIOL

Partition coefficient	log Pow: 2.6

DAMASCONE (DELTA)

Partition coefficient	log Pow: 4.2

12.4. Mobility in soil

Mobility	Soluble in water.

Ecological information on ingredients.

ETHANOL

Henry's law constant	3.3 x 10 exp -6 atm m³/mol @ °C
Surface tension	24.5 mN/m @ 20°C

METHANOL

Mobility	Soluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

ETHANOL

Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.

METHANOL

Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects	None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods	Dispose of in accordance with Local Authority regulations as special waste according to The Control of Special Waste Regulations 1996.

EURAL Code

SECTION 14: Transport information

General	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

SECTION 15: Regulatory information

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

National regulations	Health and Safety at Work etc. Act 1974 (as amended). The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"]. EH40/2005 Workplace exposure limits.

Danish product registration number

Danish national regulations

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

None of the ingredients are listed or exempt.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	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. RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail. IATA: International Air Transport Association. ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air. IMDG: International Maritime Dangerous Goods. CAS: Chemical Abstracts Service. ATE: Acute Toxicity Estimate. LC50: Lethal Concentration to 50 % of a test population. LD50: Lethal Dose to 50% of a test population (Median Lethal Dose). EC_{50}: 50% of maximal Effective Concentration. PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Very Persistent and Very Bioaccumulative.
Revision comments	Revised classification.
Revision date	18/07/2022
Revision	7
Supersedes date	25/11/2021
SDS number	7197/23294
Hazard statements in full	H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H301 Toxic if swallowed. H302 Harmful if swallowed. H311 Toxic in contact with skin. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H331 Toxic if inhaled. H370 Causes damage to organs . 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.