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

1.1. Product identifier

Product name	Wolf Flow Encapsulated Softener (Pink)
Product number	7985/23325
UFI	UFI: EJ3Q-U04C-J00P-1KUF

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

Identified uses	Last rinse additive; finishing 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

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	Not Classified
Environmental hazards	Not Classified

2.2. Label elements

Hazard statements	EUH208 Contains Tetrahydro Linalool. May produce an allergic reaction.
Precautionary statements	P262 Do not get in eyes, on skin, or on clothing.
Detergent labelling	< 5% aliphatic hydrocarbons, < 5% cationic surfactants, < 5% perfumes, Contains Linalool, LIMONENE, HEXYL CINNAMAL

2.3. Other hazards

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

SECTION 3: Compositiona/information on ingredients

3.2. Mixtures

Linalool	0.045%
CAS number: 78-70-6	EC number: 201-134-4

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

d-LIMONENE 0.031%

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 0.011%

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

EUGENOL 0.0044%

CAS number: 97-53-0 EC number: 202-589-1

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

COUMARIN 0.0044%

CAS number: 91-64-5 EC number: 202-086-7

Classification
Acute Tox. 4 - H302
Skin Sens. 1B - H317
Aquatic Chronic 3 - H412

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

Composition comments No classified ingredients, or those having occupational exposure limits, present above the levels of disclosure.

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 affected person 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	Remove contaminated clothing. Wash skin thoroughly with soap and water. 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 discomfort if swallowed. May cause stomach pain or vomiting.
Skin contact	May cause sensitisation or allergic reactions in sensitive individuals. May cause skin irritation. Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.
Eye contact	May cause eye irritation.

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

Notes for the doctor	Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or waterfog. 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	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	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. 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 additional information on health hazards. See Section 12 for additional information on ecological 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. 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, in a cool, well ventilated place.
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 controls/Personal protection

8.1. Control parameters

Occupational exposure limits

propan-2-ol

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m³
Short-term exposure limit (15-minute): WEL 500 ppm 1250 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
WEL = Workplace Exposure Limit.
Sk = Can be absorbed through the skin.

Fatty acids, C16-18 (even numbered) and C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized (CAS: 91995-81-2)

DNEL	Workers - Dermal; Long term systemic effects: 312.5 mg/kg/day Workers - Inhalation; Long term systemic effects: 44 mg/m³ General population - Oral; Long term systemic effects: 7.5 mg/kg/day General population - Inhalation; Long term systemic effects: 13 mg/m³ General population - Dermal; Long term systemic effects: 187.5 mg/kg/day
PNEC	- Fresh water; 0.065 mg/l - marine water; 0.0065 mg/l - Sediment; 141 mg/kg - Soil; 574 mg/kg - STP; 2.96

propan-2-ol (CAS: 67-63-0)

DNEL	Workers - Dermal; Long term systemic effects: 888 mg/kg bw/day Workers - Inhalation; Long term systemic effects: 500 mg/m³ Consumer - Dermal; Long term systemic effects: 319 mg/kg bw/day Consumer - Inhalation; Long term systemic effects: 89 mg/m³ Consumer - Oral; Long term systemic effects: 26 mg/kg bw/day
PNEC	- Fresh water; 140.9 mg/l - marine water; 140.9 mg/l - Intermittent release; 140.9 mg/l - STP; 2251 mg/l - Sediment; 552 mg/kg - Soil; 28 mg/kg

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

2-phenylethanol (CAS: 60-12-8)

DNEL

Workers - Inhalation; Long term systemic effects: 59.9 mg/m³
Workers - Dermal; Long term systemic effects: 21.2 mg/kg
General population - Inhalation; Long term systemic effects: 17.7 mg/m³
General population - Dermal; Long term systemic effects: 12.7 mg/kg
General population - Oral; Long term systemic effects: 5.1 mg/kg
Workers - Oral; Short term systemic effects: 5.1 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

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

2,6,10-trimethyl-9-undecenal (CAS: 141-13-9)

DNEL

Workers - Inhalation; Long term systemic effects: 23.63 mg/m³
Workers - Inhalation; Short term systemic effects: 23.63 mg/m³

	Workers - Inhalation; Long term local effects: 59.07 mg/m³ Workers - Inhalation; Short term local effects: 59.07 mg/m³ Workers - Dermal; Long term systemic effects: 6.7 mg/kg bw/day Workers - Dermal; Short term systemic effects: 160 mg/kg bw/day Workers - Dermal; Long term local effects: 0.133 mg/cm² Workers - Dermal; Short term local effects: 0.1333 mg/cm² Consumer - Inhalation; Long term systemic effects: 5.83 mg/m³ Consumer - Inhalation; Short term systemic effects: 5.83 mg/m³ Consumer - Inhalation; Long term local effects: 14.57 mg/m³ Consumer - Inhalation; Short term local effects: 14.57 mg/m³ Consumer - Dermal; Long term systemic effects: 3.35 mg/kg bw/day Consumer - Dermal; Long term local effects: 0.0381 mg/cm² Consumer - Dermal; Short term local effects: 0.0381 mg/cm² Consumer - Oral; Long term systemic effects: 3.35 mg/kg bw/day
PNEC	Fresh water; 0.000588 mg/l Sediment (Freshwater); 0.427 mg/kg dry weight marine water; 0.000059 mg/l Sediment (Marinewater); 0.043 mg/kg dry weight STP; 10 mg/l Soil; 0.093 mg/kg dry weight

8.2. Exposure controls

Protective equipment

Appropriate engineering controls	Provide adequate ventilation if the airborne contamination exceeds occupational exposure limits
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	Opaque liquid.
Colour	Pink.
Odour	Perfume.
pH	pH (diluted solution): 6-8 1%
Relative density	~ 0.97-1.03 @ 20°C
Solubility(ies)	Soluble in water.

9.2. Other information

Other information	Not known.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	The following materials may react with the product: Alkalis. Oxidising agents. Reducing agents.

10.2. Chemical stability

Stability	No particular stability concerns. Avoid contact with alkalis.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.

10.4. Conditions to avoid

Conditions to avoid	Avoid freezing.

10.5. Incompatible materials

Materials to avoid	Strong alkalisOxidising agents. 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.
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	
Animal data	Based on available data the classification criteria are not met.
Serious eye damage/irritation	
Serious eye damage/irritation	Based on available data the classification criteria are not met.
Respiratory sensitisation	
Respiratory sensitisation	Based on available data the classification criteria are not met.
Skin sensitisation	
Skin sensitisation	May cause sensitisation or allergic reactions in sensitive individuals.
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	May cause discomfort if swallowed. May cause stomach pain or vomiting.
Skin contact	The product contains a sensitising substance. May cause skin irritation. Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.
Eye contact	May cause eye irritation.
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 Inhalation Ingestion

Toxicological information on ingredients.

Fatty acids, C16-18 (even numbered) and C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized

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)	2,001.0
Species	Rat
ATE dermal (mg/kg)	2,001.0

propan-2-ol

Acute toxicity - inhalation	
Acute toxicity inhalation (LC_{50} vapours mg/l)	26.0
ATE inhalation (vapours mg/l)	26.0
Carcinogenicity	
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.

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

Linalool

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

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.

METHYLUNDECANAL

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)	10,001.0
Species	Rabbit

Mehtyl Decenol

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	8,001.0
Species	Rat
Acute toxicity - dermal	
Acute toxicity dermal (LD_{50} mg/kg)	5,001.0
Species	Rabbit

2-Tertiary-Butylcyclohexylacetate

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	4,600.0
Species	Rat
ATE oral (mg/kg)	4,600.0
Acute toxicity - dermal	

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

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	NOAEL 468.5 mg/kg, Oral, Rat

Cyclohexyl 2-hydroxybenzoate

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	3,150.0
Species	Rat
ATE oral (mg/kg)	3,150.0

Benzyl acetate

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	2,490.0
Species	Rat
ATE oral (mg/kg)	2,490.0

Carcinogenicity

IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.

Tricyclodecenyl Propionate

Acute toxicity - oral

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

3,4,5,6,6-pentamethylhept-3-en-2-one (main isomer)

Acute toxicity - dermal

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

2-phenylethanol

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	1,790.0
Species	Rat
ATE oral (mg/kg)	1,790.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	2,500.0

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

CITRONELLYL ACETATE

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	6,800.0
Species	Rat
ATE oral (mg/kg)	6,800.0

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

1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-naphthyl)Ethan-1-one

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

ATE dermal (mg/kg)	5,001.0

2-(2-(4-Methyl-3-Cyclohexen-1-yl) Propyl)-Cyclopentanone

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

AMYL SALICYLATE

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	2,000.0
Species	Rat
Acute toxicity - dermal	
Acute toxicity dermal (LD_{50} mg/kg)	5,000.0
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

Allyl Heptanoate

Acute toxicity - oral	
ATE oral (mg/kg)	100.0
Acute toxicity - dermal	
Acute toxicity dermal (LD_{50} mg/kg)	810.0
Species	Rabbit
ATE dermal (mg/kg)	810.0

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

EUGENOL

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg) 2,130.0

Species Guinea pig

ATE oral (mg/kg) 2,130.0

Carcinogenicity

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

COUMARIN

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg) 520.0

Species Rat

ATE oral (mg/kg) 520.0

Carcinogenicity

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

PARA-MENTHA-1,4 (8) - DIENE

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg) 4,390.0

Species Rat

ATE oral (mg/kg) 4,390.0

Acute toxicity - dermal

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

Species Rabbit

ATE dermal (mg/kg) 5,001.0

2-methyl-3-(4-isopropylphenyl) propanal

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg) 3,810.0

Species Rat

Acute toxicity - dermal

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

(ethoxymethoxy)cyclododecane

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)	5,001.0
Species	Rabbit
ATE dermal (mg/kg)	5,001.0

2,6,10-trimethyl-9-undecenal

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)	5,001.0
Species	Rabbit
ATE dermal (mg/kg)	5,001.0

1-(5,5-dimethyl-1-cyclohexen-1-yl)- 4-penten-1-one

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

Heliotropine

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	2,700.0
Species	Rat

Acute toxicity - dermal

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

Dodecanal

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

LINALYL ACETATE

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	13,934.0
Species	Rat
ATE oral (mg/kg)	13,934.0
Acute toxicity - dermal	
Acute toxicity dermal (LD_{50} mg/kg)	5,001.0
Species	Rabbit
ATE dermal (mg/kg)	5,001.0

Methyl Octine Carbonate

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	1,180.0
Species	Rat
ATE oral (mg/kg)	1,180.0

1,2-benzisothiazol-3(2H)-one

Acute toxicity - oral	
ATE oral (mg/kg)	500.0
Acute toxicity - inhalation	
ATE inhalation (vapours mg/l)	0.5

SECTION 12: Ecological information

Ecotoxicity	Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

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

Ecological information on ingredients.

Fatty acids, C16-18 (even numbered) and C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: >1 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 10000 mg/l, Daphnia magna

propan-2-ol

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 9640 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	LC_{50}, 24 hours: 9714 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: >100 mg/l, Scenedesmus subspicatus
Acute toxicity - microorganisms	EC_{50}, : >100 mg/l, Bacteria

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

METHYLUNDECANAL

Acute aquatic toxicity

$LE(C)_{50}$	0.1 < L(E)C50 ≤ 1
M factor (Acute)	1
Acute toxicity - fish	NOEC, 96 hours: 0.11 mg/l, Oncorhynchus mykiss (Rainbow trout) LC_{50}, 96 hours: 0.35 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 0.21 mg/l, Daphnia
Acute toxicity - aquatic plants	NOEC, 72 hours: 0.089 mg/l, Pseudokirchneriella subcapitata EC_{50}, 72 hours: 0.18 mg/l, Pseudokirchneriella subcapitata

Chronic aquatic toxicity

M factor (Chronic)	1

Mehtyl Decenol

Acute aquatic toxicity

$LE(C)_{50}$	0.1 < L(E)C50 ≤ 1

M factor (Acute)	1
Acute toxicity - fish	LC_{50}, 96 hours: 3 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 0.4 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: 3.6 mg/l, Pseudokirchneriella subcapitata NOEC, 72 hours: 1.3 mg/l, Pseudokirchneriella subcapitata

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

1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-naphthyl)Ethan-1-one

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 1.3 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 1.4 mg/l, Daphnia
Acute toxicity - aquatic plants	EC_{50}, 72 hours: 2.6 mg/l, Algae

Chronic aquatic toxicity

M factor (Chronic)	1
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 0.028 mg/l, Daphnia

2-(2-(4-Methyl-3-Cyclohexen-1-yl) Propyl)-Cyclopentanone

Acute aquatic toxicity

$LE(C)_{50}$	0.1 < L(E)C50 ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC_{50}, 96 hours: 5.47 mg/l, Brachydanio rerio (Zebra Fish)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 0.49 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: 2.9 mg/l, Selenastrum capricornutum

AMYL SALICYLATE

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 1.34 mg/l, Fish

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

Acute aquatic toxicity

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

Allyl Heptanoate

Acute aquatic toxicity

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

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

EUGENOL

Acute aquatic toxicity

$LE(C)_{50}$	0.1 < L(E)C50 ≤ 1

PARA-MENTHA-1,4 (8) - DIENE

Acute aquatic toxicity

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

Chronic aquatic toxicity

M factor (Chronic)	1

2-methyl-3-(4-isopropylphenyl) propanal

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: estimated >1 - 3 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 4.19 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 96 hours: 3.8 mg/l, Pseudokirchneriella subcapitata

2,6,10-trimethyl-9-undecenal

Acute aquatic toxicity

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

Chronic aquatic toxicity

M factor (Chronic)	1

Methyl Octine Carbonate

Acute aquatic toxicity

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

1,2-benzisothiazol-3(2H)-one

Acute aquatic toxicity

$LE(C)_{50}$	0.1 < L(E)C50 ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC_{50}, 96 hours: 1.6 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 2.94 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: 0.11 mg/l, Selenastrum capricornutum
Acute toxicity - microorganisms	EC_{20}, 3 hours: 3.3 mg/l, Activated sludge

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.

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%:

d-LIMONENE

Persistence and degradability: Not readily biodegradable.

METHYLUNDECANAL

Persistence and degradability: Readily biodegradable.

Biodegradation: Activated sludge - 62%: 28 days

Mehtyl Decenol

Persistence and degradability: Readily biodegradable.

Biodegradation: - 73%: 28 days

2-Tertiary-Butylcyclohexylacetate

Biodegradation: Activated sludge - Degradation 43 %: ~ 28 days

4-tertiary-butyl-cyclohexyl-acetate

Persistence and degradability: Readily biodegradable.

Biodegradation: - Degradation 75%:

a-hexylcinnamaldehyde

Persistence and degradability: Readily biodegradable.

Biodegradation: - 97%: 28 days

1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-naphthyl)Ethan-1-one

Persistence and degradability: Not readily biodegradable.

Biodegradation: - 11%: 28 days

AMYL SALICYLATE

Persistence and degradability: Readily biodegradable.

Biodegradation: - Degradation 86 %:

METHANOL

Persistence and degradability The product is readily biodegradable.

COUMARIN

Persistence and degradability Readily biodegradable.

2-methyl-3-(4-isopropylphenyl) propanal

Persistence and degradability Readily biodegradable.

Biodegradation - 65.5%: 28 days

12.3. Bioaccumulative potential

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

Ecological information on ingredients.

Tetrahydro Linalool

Partition coefficient log Pow: 3.3

d-LIMONENE

Partition coefficient log Kow: 2.78-5.03

Mehtyl Decenol

Partition coefficient log Pow: 3.9

2-Tertiary-Butylcyclohexylacetate

Bioaccumulative potential BCF: ~ 156, Oncorhynchus mykiss (Rainbow trout)

a-hexylcinnamaldehyde

Partition coefficient log Pow: 5.3

1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-naphthyl)Ethan-1-one

Partition coefficient log Pow: 5.65

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

Partition coefficient log Pow: 2.34

METHANOL

Partition coefficient log Pow: -0.8

2-methyl-3-(4-isopropylphenyl) propanal

Partition coefficient log Pow: 3.4

12.4. Mobility in soil

Mobility The product is soluble in water.

Ecological information on ingredients.

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.

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	Revision is due to addition of UFI number
Revision date	11/06/2021
Revision	5
Supersedes date	14/02/2019
SDS number	7985/23325
Hazard statements in full	H226 Flammable liquid and vapour. H302 Harmful if swallowed. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. EUH208 Contains Tetrahydro Linalool. May produce an allergic reaction.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.