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

1.1. Product identifier

Product code : Hygienfresh Gocce bucato con ammorbidente Fior di Cotone
Trades code : A47-025
Product line: Hygienfresh

UFI: 5833-A0MN-300D-63U7

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

Perfumes laundry with softener, with fragrance fixative and odor-eating effect
Sectors of use:
Private households (= general public = consumers)[SU21], Public domain (administration, education, entertainment, services, craftsmen)[SU22]

Uses advised against
Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

Tintolav s.r.l. - Via M. D' Antona 7 - 10028 Trofarello (TO) Tel. 011/649.68.27 Fax 011/649.67.42

Email: info@tintolav.com - Sito internet: www.tintolav.com

Email tecnico competente: a.conedera@tintolav.com

National contact: Malta: Emergency Ambulance 112
Accident & Emergency Department 2545 4030

1.4. Emergency telephone number

Members of Public in England, Scotland and Wales can contact NHS 111/NHS 24 by dialling 111
In Northern Ireland contact your local GP
In Republic of Ireland call 01 809 2166

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms:
GHS07, GHS09

Hazard Class and Category Code(s):
Skin Sens. 1B, Eye Irrit. 2, Aquatic Chronic 2

Hazard statement Code(s):
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H411 - Toxic to aquatic life with long lasting effects.

If brought into contact with eyes, the product, causes significant irritations which may last for more than 24 hours.
The product, if brought into contact with skin can cause skin sensitization.
The product is dangerous to the environment as it is toxic to aquatic life with long lasting effects

2.1.2 Additional information:

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008:



Pictogram, Signal Word Code(s):
GHS07, GHS09 - Warning

Hazard statement Code(s):
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H411 - Toxic to aquatic life with long lasting effects.

Supplemental Hazard statement Code(s):
not applicable

Precautionary statements:
General
P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
Prevention
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Response
P302+P352 - IF ON SKIN: Wash with plenty of waterand 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.
P337+P313 - If eye irritation persists: Get medical advice/attention.
Disposal
P501 - Dispose of contents / container in accordance with local and national regulations.

Contains:
aqua, parfum, dihydrogenated tallow hydroxyethylmonium methosulfate, C12-15 Alketh-3, ricinus communis oil, ethoxydiglycol, benzalkonium chloride, linalool, hexamethylindanopyran, citrus aurantium peel oil, methylundecanal, geraniol, limonene, hexyl cinnamal, terpineol, lavandula oil, citronellol, 2,4-dimethyl-3cyclohexene carboxaldehyde, amyl salicylate, tetramethyl acetyloctahydronaphthalenes, amyl cinnamal, linalyl acetate, pogostemon cablin oil, alpha isomethyl ionone, dimethyl phenethyl acetate, benzaldehyde, isoeugenyl acetate, camphor, dimethicone, steareth-21, amines, c12-16-alkyldimethyl.

Contains (Reg.EC 648/2004):
>= 5% < 15% Perfumes, Cationic surfactants, < 5% linalool, hexamethylindanopyran, citrus aurantium peel oil, geraniol, limonene, hexyl cinnamal, terpineol, lavandula oil, citronellol, amyl salicylate, tetramethyl acetyloctahydronaphthalenes, amyl cinnamal, linalyl acetate, pogostemon cablin oil, alpha isomethyl ionone, dimethyl phenethyl acetate, benzaldehyde, isoeugenyl acetate, camphor.

Content of VOC ready to use condition: 2,86 %

UFI: 5833-A0MN-300D-63U7

2.3. Other hazards

The product does not contain substances identified as endocrine disruptors for human health according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as endocrine disruptors for the environment according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as PBT according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as vPvB according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as PMT according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as vPvM according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

No information on other hazards

SECTION 3. Composition/information on ingredients

3.1 Substances

Irrilevant

3.2 Mixtures

Note C - Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
Fatty acids, C16-18 (even numbered) and C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	>= 5 < 15%	ATE oral = 5.000,000 mg/kg ATE dermal = 2.000,000 mg/kg	ND	1335202-88-4	931-203-0	01-2119463889-16-0004
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl acetate - FEMA 0	>= 1 < 5%	Aquatic Chronic 1, H410 1 1 ATE oral = 2.750,000 mg/kg ATE dermal > 5.000,000 mg/kg	ND	54830-99-8	259-367-2	01-2119488219-26
2,6-dimethyloct-7-en-2-ol - FEMA 0	>= 1 < 5%	Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H336 ATE oral = 3.600,000 mg/kg ATE dermal = 5.000,000 mg/kg	ND	18479-58-8	242-362-4	01-2119457274-37
1,4-dioxacycloheptadecane-5,17-dione - FEMA 3543	>= 1 < 5%	Aquatic Chronic 2, H411 1 1 ATE oral = 5.000,000 mg/kg	ND	105-95-3	203-347-8	01-2119976314-33-0000

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
		ATE dermal = 5.000,000 mg/kg				
Linalool	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319 ATE oral = 2.790,000 mg/kg ATE dermal = 5.610,000 mg/kg ATE inhal = 307,000 mg/l/4 h	603-235-00-2	78-70-6	201-134-4	01-2119474016-42-0000
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	>= 0,1 < 1%	Aquatic Acute 1, H400; Aquatic Chronic 1, H410 1 1 ATE oral = 3.250,000 mg/kg ATE dermal = 3.250,000 mg/kg	603-212-00-7	1222-05-5	214-946-9	01-2119488227-29-0000
2-Methylundecanal - FEMA 2749	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 1 1 ATE oral = 5.000,000 mg/kg ATE dermal = 10.000,000 mg/kg	ND	110-41-8	203-765-0	01-2119969443-29-0000
Citrus sinensis, ext. - FEMA 2825	>= 0,1 < 1%	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 1 1 ATE dermal > 5.000,000 mg/kg	ND	8028-48-6	232-433-8	01-2119493353-35
Geraniol - FEMA 2507	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Dam. 1, H318 ATE oral = 3.500,000 mg/kg ATE dermal = 5.000,000 mg/kg ATE inhal = 0,500 mg/l/4 h	603-241-00-5	106-24-1	203-377-1	01-2119552430-49-0000
dipentene Note: C	>= 0,1 < 1%	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Skin Sens. 1B, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 1 ATE oral = 4.400,000 mg/kg ATE dermal = 5.000,000 mg/kg	601-096-00-2	5989-27-5	227-813-5	01-2119529223-47-0001

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
Hexyl salicylate - FEMA 0	>= 0,10 < 1%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Irrit. 2, H319; Repr. 2, H361d; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 1 1 ATE oral > 5.000,000 mg/kg ATE dermal > 5.000,000 mg/kg	607-772-00-3	6259-76-3	228-408-6	01-2119638275-36-0002
α-Hexylcinnamaldehyde	>= 0,1 < 1%	Skin Sens. 1, H317; Aquatic Acute 1, H400; Aquatic Chronic 2, H411 ATE oral = 2.450,000 mg/kg	ND	101-86-0	202-983-3	01-2119533092-50
Terpineol - FEMA 0	>= 0,1 < 1%	Skin Irrit. 2, H315; Eye Irrit. 2, H319 ATE oral = 2.000,000 mg/kg ATE dermal = 2.000,000 mg/kg ATE inhal = 4,760 mg/l/4 h	ND	8000-41-7	232-268-1	01-2119553062-49-xxxx
Lavender, Lavandula hybrida grosso, ext. - FEMA 0	>= 0,1 < 1%	Skin Sens. 1, H317; Eye Irrit. 2, H319; Aquatic Chronic 3, H412 1 1 ATE oral = 5.000,000 mg/kg ATE dermal = 5.000,000 mg/kg	ND	93455-97-1	297-385-2	ND
Citronellol	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319; STOT SE 3, H335 ATE oral = 3.450,000 mg/kg ATE dermal = 2.650,000 mg/kg ATE inhal = 1,300 mg/l/4 h	ND	106-22-9	203-375-0	01-2119453995-23-0000
2,4-dimethylcyclohex-3-ene-1-carbaldehyde - FEMA 0	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Irrit. 2, H319; Aquatic Chronic 3, H412 1 1 ATE oral = 4.000,000 mg/kg ATE dermal = 5.000,000 mg/kg	605-043-00-4	68039-49-6	268-264-1	01-2119982384-28
cineole - FEMA 2465	>= 0,1 < 1%	Flam. Liq. 3, H226; Skin Sens. 1B, H317; Eye Irrit. 2, H319 ATE oral = 2.480,000	ND	470-82-6	207-431-5	01-2119967772-24

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
		mg/kg ATE dermal = 5.000,000 mg/kg				
pentyl salicylate - FEMA 0	< 0,1%	Acute Tox. 4, H302; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 1 1 ATE oral = 2.000,000 mg/kg	ND	2050-08-0	218-080-2	01-2120771342-58
1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone - FEMA 0	< 0,1%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 1 1 ATE oral > 5.000,000 mg/kg ATE dermal > 5.000,000 mg/kg	ND	54464-57-2	259-174-3	01-2119489989-04
2-benzylideneheptanal	< 0,1%	Skin Sens. 1, H317; Aquatic Chronic 2, H411 ATE oral = 3.730,000 mg/kg ATE dermal = 2.000,000 mg/kg	ND	122-40-7	204-541-5	01-2119978288-18
ethanol	< 0,1%	Flam. Liq. 2, H225; Eye Irrit. 2, H319 Limits: Eye Irrit. 2, H319 %C >=50; ATE oral = 7.060,000 mg/kg ATE dermal = 20.000,000 mg/kg ATE inhal = 116,900 mg/l/4 h	603-002-00-5	64-17-5	200-578-6	01-2119457610-43

SECTION 4. First aid measures

4.1. Description of first aid measures

Inhalation:
Air the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area. If you feel unwell seek medical advice.

Direct contact with skin (of the pure product).:
Take contaminated clothing Immediately off.
Wash immediately with plenty of running water and possibly with soap, the areas of the body that have, or are only suspected to have, come in contact with the product.
In case of contact with skin, wash immediately with soap and water

Direct contact with eyes (of the pure product).:
Wash immediately and thoroughly with running water, keeping eyelids open for at least 10 minutes, then protect your eyes with a dry sterile gauze. Seek medical advice immediately
Do not use eye drops or ointments of any kind before the examination or advice from an oculist.

Ingestion:
Not hazardous. It's possible to give activated charcoal in water or liquid paraffin medicine

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

No data available.

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

If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
If medical advice is needed, have product container or label at hand.

SECTION 5. Firefighting measures

5.1. Extinguishing media

Advised extinguishing agents:
Water spray, CO2, foam, dry chemical, depending on the materials involved in the fire.

Extinguishing means to avoid:
Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

5.2. Special hazards arising from the substance or mixture

No data available.

5.3. Advice for firefighters

Use protection for the breathing apparatus
Safety helmet and full protective suit.
The spray water can be used to protect the people involved in the extinction
You may also use selfrespirator, especially when working in confined and poorly ventilated area and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...)
Keep containers cool with water spray

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:
Leave the area surrounding the spill or release. Do not smoke
Wear gloves and protective clothing

6.1.2 For emergency responders:
Wear gloves and protective clothing
Eliminate all unguarded flames and possible sources of ignition. No smoking.
Provision of sufficient ventilation.
Evacuate the danger area and, in case, consult an expert.

6.2. Environmental precautions

Contain spill with earth or sand.
If the product has entered a watercourse in sewers or has contaminated soil or vegetation, notify it to the authorities.
Discharge the remains in compliance with the regulations

6.3. Methods and material for containment and cleaning up

6.3.1 For containment:
Rapidly recover the product, wear a mask and protective clothing
Recover the product for reuse, if possible, or for removal. Possibly absorb it with inert material.
Prevent it from entering the sewer system.

6.3.2 For cleaning up:
After wiping up, wash with water the area and materials involved

6.3.3 Other information:
None in particular.

6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid contact and inhalation of vapors
Wear protective gloves/protective clothing/eye protection/face protection.
At work do not eat or drink.
Contaminated work clothing should not be allowed out of the workplace.
See also paragraph 8 below.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container closed tightly. Do not store in open or unlabeled containers.
Keep containers upright and safe by avoiding the possibility of falls or collisions.
Store in a cool place, away from sources of heat and `direct exposure of sunlight.

7.3. Specific end use(s)

Private households (= general public = consumers):
Handle with care.
Store in ventilated place away from heat sources,
Keep the container tightly closed.

Public domain (administration, education, entertainment, services, craftsmen):
Handle with care. Store in a ventilated area and away from heat, keep the container tightly closed.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Related to contained substances:
dipentene:
TWA: 30 from AIHA
TWA: 165.5 (mg/m3) from AIHA

ethanol:
Component CAS-No. Value Control parameters
Basis
Ethanol-17-64 TWA 5 ppm 1.000
1.920 mg/m3
UK. EH40 WEL-Workplace Exposure Limits
Remarks Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used

- Substance: Fatty acids, C16-18 (even numbered) and C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized
DNEL
Systemic effects Long term Workers inhalation = 44 (mg/m3)
Systemic effects Long term Workers dermal = 312,5 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 13 (mg/m3)
Systemic effects Long term Consumers dermal = 187,5 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 7,5 (mg/kg bw/day)
PNEC
Sweet water = 0,00191 (mg/l)
sediment Sweet water = 0,58 (mg/kg/sediment)
Sea water = 0,000191 (mg/l)
sediment Sea water = 0,058 (mg/kg/sediment)
STP = 2,96 (mg/l)
ground = 0,115 (mg/kg ground)

- Substance: Linalool
DNEL
Systemic effects Long term Workers inhalation = 2,8 (mg/m3)
Systemic effects Long term Workers dermal = 2,5 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 0,7 (mg/m3)
Systemic effects Long term Consumers dermal = 1,25 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 0,2 (mg/kg bw/day)

- Substance: 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran
DNEL
Systemic effects Long term Workers inhalation = 22 (mg/m3)
Systemic effects Long term Workers dermal = 60 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 6,5 (mg/m3)
Systemic effects Long term Consumers dermal = 36 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 3,8 (mg/kg bw/day)
PNEC
Sweet water = 0,0044 (mg/l)
sediment Sweet water = 2 (mg/kg/sediment)
Sea water = 0,00044 (mg/l)
sediment Sea water = 0,394 (mg/kg/sediment)
ground = 0,31 (mg/kg ground)

- Substance: Geraniol
DNEL
Systemic effects Long term Workers inhalation = 161,6 (mg/m3)

- Substance: Hexyl salicylate
DNEL
Systemic effects Long term Workers inhalation = 0,79 (mg/m3)
Systemic effects Long term Workers dermal = 2083 (mg/kg bw/day)
Systemic effects Short term Workers inhalation = 0,79 (mg/m3)
Systemic effects Short term Workers dermal = 2083 (mg/kg bw/day)

- Substance: α-Hexylcinnamaldehyde
DNEL
Systemic effects Long term Workers inhalation = 0,000078 (mg/m3)
Systemic effects Short term Workers inhalation = 0,00628 (mg/m3)
PNEC
Sweet water = 0,03 (mg/l)
sediment Sweet water = 47,7 (mg/kg/sediment)

Sea water = 0,003 (mg/l)
sediment Sea water = 4,77 (mg/kg/sediment)
ground = 9,51 (mg/kg ground)

- Substance: Terpineol
DNEL
Systemic effects Long term Workers inhalation = 5,8 (mg/m3)

- Substance: Citronellol
DNEL
Systemic effects Long term Workers inhalation = 161,6 (mg/m3)

- Substance: 1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone
DNEL
Systemic effects Long term Workers inhalation = 1,76 (mg/m3)
Systemic effects Long term Workers dermal = 1,73 (mg/kg bw/day)
Systemic effects Short term Workers inhalation = 1,76 (mg/m3)
Systemic effects Short term Workers dermal = 1,73 (mg/kg bw/day)
PNEC
Sweet water = 0,0028 (mg/l)
sediment Sweet water = 3,73 (mg/kg/sediment)
Sea water = 0,00028 (mg/l)
sediment Sea water = 0,75 (mg/kg/sediment)
ground = 0,705 (mg/kg ground)

- Substance: ethanol
DNEL
Systemic effects Long term Workers inhalation = 950 (mg/m3)
Systemic effects Long term Workers dermal = 343 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 114 (mg/m3)
Systemic effects Long term Consumers dermal = 206 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 87 (mg/kg bw/day)
PNEC
Sweet water = 0,96 (mg/l)
sediment Sweet water = 3,6 (mg/kg/sediment)
Sea water = 0,79 (mg/l)
sediment Sea water = 2,9 (mg/kg/sediment)
STP = 580 (mg/l)
ground = 0,63 (mg/kg ground)

8.2. Exposure controls



Appropriate engineering controls:
Private households (= general public = consumers):
No specific checks planned

Public domain (administration, education, entertainment, services, craftsmen):
No specific monitoring foreseen

Individual protection measures:

(a) Eye / face protection

When handling the pure product use safety glasses (spectacles cage) (EN 166).

(b) Skin protection

(i) Hand protection

Manipulate with gloves. The gloves should be checked before being used. Use a technique suitable for the removal of gloves (without touching the outside of the glove) to avoid skin contact with this product dispose of contaminated gloves after use in accordance with the legislation and good laboratory practices. Wash and dry your hands.
Selected protective gloves shall comply with the requirements of EU Directive 89/686/EEC and EN 374 standards arising therefrom.
Full contact
Material: nitrile rubber
minimum thickness: 0.11 mm
permeation time: 480 min

(ii) Other

When handling the pure product wear full protective skin clothing.

(c) Respiratory protection

Not needed for normal use.

(d) Thermal hazards

No hazard to report

Environmental exposure controls:

Related to contained substances:

dipentene:
Do not let this chemical agent contaminate the environment.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Physical state	Liquid	
Colour	white	
Odour	Characteristic	
Odour threshold	not determined	
Melting point/freezing point	not determined	
Boiling point or initial boiling point and boiling range	not determined	
Flammability	irrelevant	
Lower and upper explosion limit	not determined	
Flash point	> 65 °C	
Auto-ignition temperature	not determined	
Decomposition temperature	not determined	
pH	3-4	
Kinematic viscosity	undefined	
Solubility	Completely soluble in water	
Water solubility	not determined	

Physical and chemical properties	Value	Determination method
Partition coefficient n-octanol/water (log value)	not determined	
Vapour pressure	not determined	
Density and/or relative density	0,95 - 1,00 g/cm3 @ 20 °C	
Relative vapour density	not determined	
Particle characteristics	irrelevant	

9.2. Other information

Content of VOC ready to use condition: 2,86 %

9.2.1 Information with regard to physical hazard classes

Irrilevant

9.2.2 Other safety characteristics

Irrilevant

SECTION 10. Stability and reactivity

10.1. Reactivity

No reactivity hazards

10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

There are no hazardous reactions

10.4. Conditions to avoid

Nothing to report

10.5. Incompatible materials

It can generate inflammable gases to contact with elementary metals, nitrides, inorganic sulfide, strong reducing agents.
It can generate toxic gases to contact with inorganic solfide, strong reducing agents.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11. Toxicological information

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

ATE(mix) oral = 26.234,9 mg/kg
ATE(mix) dermal = ∞
ATE(mix) inhal = ∞

(a) acute toxicity: 2,6-dimethyloct-7-en-2-ol: LD50 Oral - rat - 3,600 mg/kg
LD50 Dermal - rabbit - > 5,000 mg/kg
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran: Acute Oral Toxicity
(1) Wistar rats (10/sex) were administered commercial grade HHCB (65% HHCB in either diethyl phthalate or isopropyl myristate) via gavage at 5000 mg/kg-bw and observed for 14 days. The corrected dose of HHCB was 3250 mg/kg-bw. One death occurred at this dose.
LD50 > 3250 mg/kg-bw
(2) Rats (10 females/dose; strain not specified) were administered commercial sample (65% HHCB in either diethyl phthalate or isopropyl myristate) via gavage at 3000 mg/kg-bw and observed for 14 days. It is not clear whether the reported dose reflected dose of the mixture or of HHCB. Therefore, a conservative estimate of the LD50 is considered to be 65% of the test concentration. No mortality was observed during the study.
LD50 > 1950 mg/kg-bw
Geraniol: LD50 Oral (rat) (mg / kg body weight) = 3500
LD50 Dermal (rabbit) (mg / kg body weight) => 5000
LC50 Inhalation (rat) of vapor / dust / aerosol / smoke (mg / l / 4h): 0.5
dipentene: LD50 Oral-rat-4.400 mg/kg
Remarks: Behavioral: Change in motor activity (specific assay). Respiratory disorder Skin and Appendages: Other: Hair. Inhalation: Irritating to respiratory system.
LD50 Dermal-rabbit->5.000 mg/kg
α-Hexylcinnamaldehyde: Oral (rat) LD50: 2450 mg/kg
Citronellol: orl-rat LD50:3450 mg/kg
skn-rbt LD50:2650 mg/kg
ihl-rat LCLo:1.3 mg/m3/4H
2,4-dimethylcyclohex-3-ene-1-carbaldehyde: LD 50 ORAL (mg/kg) : >4000
ORGANISM : RAT

LD 50 DERMAL (mg/kg) : >5000
ORGANISM : RABBIT
pentyl salicylate: LC50 = 15.8 mg/L 83d Zebra fish (Brachydanio rerio)
1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone: TOXIC DOSE 1-LD > 50 5000 mg/kg (oral rat)
TOXIC DOSE 2-LD > 50 5000 mg/kg (skn-rbt)
2-benzylideneheptanal: orl-rat LD50: 3730 mg / kg
The dermal LD50 value for alpha-amylcinnamaldehyde was calculated to be greater than 2000 mglkg.
ethanol: LD50 Oral-rat-7.060 mg/kg
Remarks: Lungs, Thorax, or Respiration: Other changes.
LC50 Inhalation-rat-10:0-20000 ppm
(b) skincorrosion/irritation: 2,6-dimethyloct-7-en-2-ol: Skin - rabbit
Result: Mild skin irritation - 24 h
(Draize Test)
Geraniol: skn-rbt 100 mg/24H SEV
skn-gpg 100 mg/24H SEV
skn-man 16 mg/24H SEV
Terpineol: Skin-rabbit-skin irritant-Draize Test
Citronellol: skn-rbt 100 mg/24H SEV
Skin - Human - Skin irritation - 48 h
2,4-dimethylcyclohex-3-ene-1-carbaldehyde: TEST : ACUTE DERMAL IRRITATION
ORGANISM : RABBIT
2-benzylideneheptanal: skn-rbt 100 mg/24H SEV
skn-gpg 100 mg/24H MOD
ethanol: Skin-rabbit
Result: Irritating to skin. -12:0 am
(c) serious eye damage/irritation: If brought into contact with eyes, the product, causes significant irritations which may last for more than 24 hours.

Geraniol: Eyes-rabbit
Result: Risk of serious damage to eyes. -12:00 am
(Directive 67/548/EEC, Annex V, b. 5.)
ethanol: Eyes-rabbit
Result: Mild eye irritation-12:0 am
(Draize Test)
2,6-dimethyloct-7-en-2-ol: Eyes - rabbit
Result: Moderate eye irritation
(Draize Test)
Terpineol: Eyes-rabbit-Slight eye irritation Test Draize
(d) respiratoryorskinsensitisation: The product, if brought into contact with skin can cause skin sensitization.
2,6-dimethyloct-7-en-2-ol: Maximisation Test
Did not cause sensitisation on laboratory anima
Geraniol: Guinea pig
May cause sensitisation by skin contact.
Citronellol: mouse - May cause sensitization by skin contact.
2,4-dimethylcyclohex-3-ene-1-carbaldehyde: SENSITIZATION (ANIMAL): SENSITIZING
TEST : SKIN SENSITIZATION
ORGANISM : GUINEA PIG

SENSITIZATION (HUMAN) : NOT SENSITIZING
TEST : HRIPT
AT 10.00 (%) IN PETLM
(e) germ cell mutagenicity: based on available data, the classification criteria are not met.
(f) carcinogenicity: Geraniol: No component of this product present at levels greater than or equal to 0.1% is identified as
probable, possible or confirmed human carcinogen by IARC.
dipentene: Carcinogenicity-rat-Oral
Tumorigenic: Carcinogenic by RTECS criteria. Kidney, Ureter, Bladder: Kidney tumors. Tumorigenic Effects: Testicular tumors.
Carcinogenicity-mouse-Oral
Equivocal tumorigenic agent by RTECS criteria: Tumorigenic. Gastrointestinal: Tumors.
This product is or contains a component that is not classifiable as to its carcinogenicity IARC, ACGIH, NTP, based on its or EPA classification.
IARC: Group 3-3: Not classifiable as to its carcinogenicity to humans (D-Limonene)
(g) eproductivetoxicity: 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran: Mated female Crl:CD(SD)Br rats (animals/sex/dose not specified) were administered HHCB via gavage at 0, 2, 6 or
20 mg/kg-bw/day beginning on gestation day 14. The F1 offspring were exposed in utero and throughout lactation. At the end of the pre-weaning period, 24 male and 24 female pups per dose were retained for further study. On day 22 post-partum, excess pups and parents were sacrificed and examined for abnormalities. When offspring were 84 days of age, males and females were mated and produced litters. After day 21 post-partum, all F2 pups and F1 dams were sacrificed and examined internally and externally for abnormalities. No adverse effects on behavior or reproduction were observed at any dose in parental animals or in F1 or F2 pups.
NOAEL (systemic and reproductive toxicity) = 20 mg/kg-bw/day (based on no effects at the highest dose tested)
ethanol: Reproductive toxicity-Human-female-Oral
Effects on Newborn: Apgar score (human only). Effects on Newborn: Other measures or neonatal effects.
Effects on Newborn: Drug dependence.
(h) specific target organ toxicity (STOT) single exposure: based on available data, the classification criteria are not met.
(i) specific target organ toxicity (STOT) repeated
exposure1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran: Sprague-Dawley rats (15/sex/dose) were administered HHCB via the diet at 0, 5, 15, 50 or 150 mg/kg-bw/day for 13
weeks. Test concentrations were determined from a range finding study in which a LOAEL of 300 mg/kg-bw/day (based on hepatic effects) was determined. Mean estimated test substance intakes were 5.4, 15.7, 51.8 or 155.8 mg/kg-bw/day for males and 5.1, 15.6, 51.9 or 154.6 mg/kg-bw/day for females. There were no mortalities, adverse clinical signs or treatment-related effects on body weight, hematology or ophthalmologic evaluation. Slightly lower mean plasma triglyceride levels were observed at week13 in males at 50 and 150 mg/kg-bw/day. Slightly lower plasma glucose concentrations were noted at week 7 in males and females given 15, 50 and 150 mg/kg-bw/day and at week 13 in males given 50 and 150 mg/kg-bw/day; these effects were not seen at the end of the 4-week recovery

period. There were no treatment-related differences in absolute organ weights or organ weight
(j) aspiration hazard: based on available data, the classification criteria are not met.

Health hazards :
Eye contact: Accidental contact of the product with the eyes may cause irritation.
Skin contact: The product is not an irritant. Repeated and prolonged direct contact can degrease and irritate the skin, in some cases causing dermatitis.
Ingestion: Ingested product may cause irritation of the mucous membranes of the throat and digestive system with consequent abnormal digestive symptoms and intestinal disturbances.
Inhalation: Prolonged exposure to vapors or mists of the product can cause irritation to the respiratory tract.

Related to contained substances:
Fatty acids, C16-18 (even numbered) and C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized:
Oral, LD50: 5000 mg / kg (rat)
Dermal, LD50:> 2000 mg / kg (rat)
LD50 (rat) Oral (mg/kg body weight) = 5000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl acetate:
Acute oral toxicity : Acute toxicity estimate Dose: 2,750 mg/kg Method: Calculation method
Acute oral toxicity (Component) : LD50 rat Dose: 2,750 mg/kg Method: OECD Test Guideline 401 Remarks: IFF
Acute dermal toxicity LD50 rat Dose: > 5,000 mg/kg Method: OECD Test Guideline 402
LD50 (rat) Oral (mg/kg body weight) = 2750
LD50 Dermal (rat or rabbit) (mg/kg body weight) > 5000

2,6-dimethyloct-7-en-2-ol:
Skin - rabbit
Result: Mild skin irritation - 24 h
(Draize Test)
Eyes - rabbit
Result: Moderate eye irritation
(Draize Test)
Oral LD50 (rat) : 3600 mg/kg
Dermal LD50 (rabbit) >5000 mg/kg
LD50 (rat) Oral (mg/kg body weight) = 3600
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

1,4-dioxacycloheptadecane-5,17-dione:
LD50 (rat) Oral (mg/kg body weight) = 5000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

Linalool:
LD50 (rat) Oral (mg/kg body weight) = 2790
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5610
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 307

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran:
LD50 (rat) Oral (mg/kg body weight) = 3250
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 3250

2-Methylundecanal:
LD50 Oral - rat -> 5.000 mg / kg
DL50 Dermal - rabbit -> 10,000 mg / kg
LD50 (rat) Oral (mg/kg body weight) = 5000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 10000

Citrus sinensis, ext.:
LD50 Dermal (rat or rabbit) (mg/kg body weight) > 5000

Geraniol:
LD50 (rat) Oral (mg/kg body weight) = 3500
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 0,5

dipentene:
Routes of Entry: Absorbed through skin. Eye contact. Inhalation. Ingestion.
Toxicity to Animals:
Acute oral toxicity (LD50): 4400 mg/kg [Rat].
Acute dermal toxicity (LD50): >5000 mg/kg [Rabbit].
Chronic Effects on Humans: CARCINOGENIC EFFECTS: 3 (Not classifiable for human.) by IARC.
Other Toxic Effects on Humans:
Hazardous in case of skin contact (irritant, sensitizer), of inhalation (lung irritant).
Slightly hazardous in case of skin contact (permeator), of ingestion.
Special Remarks on Toxicity to Animals: Not available.
Special Remarks on Chronic Effects on Humans: May cause adverse reproductive effects and birth defects (teratogenic)
Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects:
Skin: Causes skin irritation. It can be absorbed through intact skin. However, it is generally regarded to have low toxicity by dermal route.
Eyes: Causes eye irritation.
Inhalation: Aspiration of large doses may produce pulmonary edema and chemical pneumonitis. May cause dizziness and suffocation. No nasal or pharyngeal irritation has been reported.
Ingestion: It is generally regarded to have low toxicity by oral route. It may produce burning pain in the mouth and throat, abdominal pain, nausea, vomiting, and diarrhea. There may an odor of terpenes in the vomitus or breath.
It may affect behavior/central nervous and peripheral nervous system. Central nervous system effects may include excitememt, somnolence, delirium, ataxia, convulsions, and stupor while peripheral system effects may include spastic paralysis. It may affect respiration (respiratory depression, choking, coughing, dyspnea, cyanosis). Other symptoms may include cyanosis, fever, and tachycardia. Systemic absorption of large doses may produce pulmonary edema and chemical pneumonitis. The urine may smell like violets.
Chronic Potential Health Effects:
Ingestion: Prolonged or repeated ingestion may produce nausea, lowered blood sugar and cholesterol, and kidney damage (hematuria, albuminuria, tubular necrosis), and may also affect the liver.
Skin: It may be a weak sensitizer and responsible for some rare allergic responses (dermatitis)
LD50 (rat) Oral (mg/kg body weight) = 4400
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

Hexyl salicylate:
LD50 (rat) Oral (mg/kg body weight) > 5000
LD50 Dermal (rat or rabbit) (mg/kg body weight) > 5000

α-Hexylcinnamaldehyde:
LD50 (rat) Oral (mg/kg body weight) = 2450

Terpineol:
LD50 oral, rat-5,420 mg/kg
Ld50 oral, rat-4,300 mg/kg
Dermal Ld50-rabbit-> 2,000 mg/kg
LD50 (rat) Oral (mg/kg body weight) = 2000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 4,76

Lavender, Lavandula hybrida grosso, ext.:
LD50 (rat) Oral (mg/kg body weight) = 5000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

Citronellol:

LD50 (rat) Oral (mg/kg body weight) = 3450
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2650
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 1,3

2,4-dimethylcyclohex-3-ene-1-carbaldehyde:
LD50 (rat) Oral (mg/kg body weight) = 4000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

cineole:
LD50 (rat) Oral (mg/kg body weight) = 2480
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

pentyl salicylate:
LD50 (rat) Oral (mg/kg body weight) = 2000

1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone:
LD50 (rat) Oral (mg/kg body weight) > 5000
LD50 Dermal (rat or rabbit) (mg/kg body weight) > 5000

2-benzylideneheptanal:
LD50 (rat) Oral (mg/kg body weight) = 3730
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

ethanol:
ROUTES of EXPOSURE: the substance can be absorbed into the body by inhalation of its fumes and ingestion.
INHALATION RISK: A harmful contamination of the air will be reached quite slowly due to evaporation of the substance at 20 C.
Effects of short-term exposure: the substance is irritating to the eyes. Inhalation of high vapour can concetrazioni cause irritation of the eyes and respiratory tract. The substance may cause effects on the central nervous system effects of REPEATED EXPOSURE or long term: the liquid degreasing the skin features. The substance may have an effect on the high central nervous system respiratory tract, causing irritation, headaches, fatigue and lack of concentration. See Notes.

ACUTE HAZARDS/Symptoms INHALATION Cough. Headaches. Fatigue. Drowsiness.
CUTE CUTE.
EYE Redness. Pain. Burning.
SWALLOWED burning sensation. Headaches. Confusion. Vertigo. State of unconsciousness.

N O T and consumption of ethanol during pregnancy can have adverse effects on the unborn child. Chronic ethanol ingestion can cause cirrhosis of the liver.
LD50 (rat) Oral (mg/kg body weight) = 7060
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 20000
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 116,9

11.2. Information on other hazards

No data available.

11.2.1. Endocrine disrupting properties

The product does not contain substances identified as endocrine disruptors for human health according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as endocrine disruptors for the environment according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

SECTION 12. Ecological information

12.1. Toxicity

Related to contained substances:
Fatty acids, C16-18 (even numbered) and C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized:
fish, CL50 : 1,91 mg/l (OECD 203 (96h))
daphnia, CE50 : 2,23 mg/l (EU Method C.2 (48h))
alga, CI50 : 2,14 mg/l (OECD 201 (72h))
C(E)L50 (mg/l) = 1,91 1
1

3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl acetate:
Toxicity to fish: flow-through test LC50 Species: Danio rerio (zebra fish) Dose: 15.8 mg/l
Exposure time: 96 h Method: Directive 67/548/EEC, Annex V, C.1.
Toxicity to daphnia and other aquatic invertebrates.: static test EC50
Species: Daphnia magna (Water flea) Dose: 25 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae: static testEC50 Species: Desmodesmus subspicatus (green algae)
Dose: 25 mg/l Exposure time: 72 h Method: OECD Test Guideline 201

C(E)L50 (mg/l) = 15,8 1
1

2,6-dimethyloct-7-en-2-ol:
96 Hour LC50 = 4.81 mg/l EPA ECOSAR
Daphnia magna 48 hrs LC50 = 5.70 mg
Green algae 96 hr NOEC, LOEC or NOEL, LOEL EC50 = 3.88 mgl
C(E)L50 (mg/l) = 4,81 1
1

1,4-dioxacycloheptadecane-5,17-dione:
C(E)L50 (mg/l) = 3,5

Linalool:
Fish: 96h LC50:39 mg/L (Oryzias latipes)
Crustacea: 48h EC50:52 mg/L (Daphnia magna)
Algae: 72h EC50:28 mg/L (Selenastrum capricornutum)
C(E)L50 (mg/l) = 27,799999 1
1

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran:
21 days Daphnia magna NOEC 111 g/L NOEC 21 days Bluegill sunfish (lepomismacrochirus) 68 g/L NOEC 35-day early life stage test Fathead minnows (Pimephales promelas) 68 g/L NOEC 72 h Algae (Pseudokirchneriella subcapitata) 201 g/L 8 weeks NOEC Earthworm (Eisenia fetida) 45 g/kg Soil DM 4 weeks Springtails NOEC (Folsomia candida) 45 g/kg Soil DM
C(E)L50 (mg/l) = 0,282 1
1

Geraniol:
static test LC50-zebrafish (zebra fish)-ca. 22 mg/l-96 h (OECD Test Guideline 203)
Broadcast application EC50-Daphnia magna (Water flea)-10.8 mg/l-48 h (OECD Test Guideline 202)
Growth inhibition EC50-Desmodesmus subspicatus (green algae)-13.1 mg/l-72 h
C(E)L50 (mg/l) = 10,8 1
1

dipentene:
Ecotoxicity: Not available.
BOD5 and COD: Not available.
Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.
Special Remarks on the Products of Biodegradation: Not available.
C(E)L50 (mg/l) = 0,702 1

α-Hexylcinnamaldehyde:
Freshwater Fish Toxicity: acute LC50 >1-10 mg/L
Freshwater Invertebrates Toxicity: acute EC <1 mg/L
Algal Toxicity: acute EC <1 mg/L.
C(E)L50 (mg/l) = 0,99

Terpineol:
C(E)L50 (mg/l) = 68

Citronellol:
LC50 (96 h) 14,66 mg/l, Leuciscus idus
EC50 (48 h) 17 mg/l, Daphnia magna
EC50 (72 h) 2,4 mg/l, Scenedesmus subspicatus
C(E)L50 (mg/l) = 2,4 1
1

cineole:
C(E)L50 (mg/l) = 102

1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone:
Endpoint: LC50 species: lepomismacrochirus (fish-salt Bluegrill) = 1.30 mg/l-h Duration: 96-Note:: method: OECD 203 TG
Endpoint: EC50-species: Daphnia magna (Water flea) = 1.38 mg/l-h Duration: 48-comments:: semi-static test method: OECD TG 202
Endpoint: EC50 Desmodesmus subspicatus-species (green algae) = 2.60 mg/l-h Duration: 72-
Note:: static test method: OECD TG201
C(E)L50 (mg/l) = 1,3 1
1

2-benzylideneheptanal:
Fish: 96h LC50: 0.91 mg / L (Oryzias latipes)
Crustacea: 48h EC50: 0.28 mg / L (Daphnia magna)
Algae: 72h EC50: 2.3 mg / L (Selenastrum capricornutum)
C(E)L50 (mg/l) = 0,28

ethanol:
C(E)L50 (mg/l) = 11200

The product is dangerous for the environment as it is toxic to aquatic organisms following acute exposure.

Use according to good working practices to avoid pollution into the environment.

12.2. Persistence and degradability

Related to contained substances:
2,6-dimethyloct-7-en-2-ol:
72% within 28 days in an OECD 301B assay

Linalool:
90 % (by BOD), 99 % (by TOC), 100 % (by GC)

Geraniol:
Aerobic chemical oxygen demand:
Exposure time 3 days
Result: 80 - 100% - Easily biodegradable.
(OECD Test Guideline 301A)

pentyl salicylate:
Pentyl 2-hydroxybenzoate is predicted to be readily degradable.

2-benzylideneheptanal:
51% (by BOD), 81% (by TOC)

12.3. Bioaccumulative potential

Related to contained substances:
Linalool:
106

12.4. Mobility in soil

Related to contained substances:
Linalool:
log Pow: 2.55
Soil adsorption (Koc): 75
Henry's Law constant(PaM3/mol): 2

Geraniol:
log Pow: 3.47

12.5. Results of PBT and vPvB assessment

The product does not contain substances identified as PBT according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as vPvB according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

12.6. Endocrine disrupting properties

The product does not contain substances identified as endocrine disruptors for human health according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as endocrine disruptors for the environment according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

12.7. Other adverse effects

No adverse effects

Regulation (EC) No 2006/907 - 2004/648
The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Do not reuse empty containers. Dispose of them in accordance with the regulations in force. Any remaining product should be disposed of according to applicable regulations by addressing to authorized companies.
Recover if possible. Send to authorized discharge plants or for incineration under controlled conditions. Operate according to local and National rules in force

SECTION 14. Transport information

14.1. UN number or ID number

ADR/RID/IMDG/ICAO-IATA: 3082



ADR exemption because compliance with the following characteristics:
Combination packagings: per inner packaging 5 L per package 30 kg
Inner packagings placed in skrink-wrapped or stretch-wrapped trays: per inner packaging 5 L per package 20 kg

14.2. UN proper shipping name

ADR/RID/IMDG: MATERIA PERICOLOSA PER L'AMBIENTE, LIQUIDA, N.A.S.
(1,4-dioxacycloheptadecane-5,17-dione, 1,3,4,6,7,8-esaidro-4,6,6,7,8,8-esametillinden[5,6-c]pirano, dipentene, α-Hexylcinnamaldehyde, 2-cicloesilidene-2-fenilacetonitrile, salicilato di pentile, 1',2',3',4',5',6',7',8'-ottaidro-2',3',8',8'-tetrametil-2'-acetonaftone, 2-benzylideneheptanal, Cineolo, Composti di ammonio quaternario, benzil-C12-16-alchildimetil, cloruri, Benzaldehyde, delta-1-(2,6,6-Trimethyl-3-cyclohexen-1-yl)-2-buten-1-one, etanolo)
ADR/RID/IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(1,4-dioxacycloheptadecane-5,17-dione, 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran, dipentene, α-Hexylcinnamaldehyde, 2-cyclohexylidene-2-phenylacetonitrile, pentyl salicylate, 1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone, 2-benzylideneheptanal, cineole, Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides, benzaldehyde, 1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one, ethanol)
ICAO-IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(1,4-dioxacycloheptadecane-5,17-dione, 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran, dipentene, α-Hexylcinnamaldehyde, 2-cyclohexylidene-2-phenylacetonitrile, pentyl salicylate, 1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone, 2-benzylideneheptanal, cineole, Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides, benzaldehyde, 1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one, ethanol)

14.3. Transport hazard class(es)

ADR/RID/IMDG/ICAO-IATA: Class : 9
ADR/RID/IMDG/ICAO-IATA: Label : Limited quantities
ADR: Tunnel restriction code : --
ADR/RID/IMDG/ICAO-IATA: Limited quantities : 5 L
IMDG - EmS : F-A, S-F

14.4. Packing group

ADR/RID/IMDG/ICAO-IATA: III

14.5. Environmental hazards

ADR/RID/ICAO-IATA: Product is environmentally hazardous
IMDG: Marine polluting agent : Yes

14.6. Special precautions for user

No data available.

14.7. Maritime transport in bulk according to IMO instruments

It is not intended to carry bulk

SECTION 15. Regulatory information

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

DELEGATED REGULATION (EU) 2024/2564 (ATP XXII)
DELEGATED REGULATION (EU) 2023/707
Seveso category:
E2 - ENVIRONMENTAL HAZARDS

REGULATION (EU) No 1357/2014 - waste:
HP14 - Ecotoxic

Substances in the Candidate List (REACH Article 59)
Based on available data, no SVHC substances are present

15.2. Chemical safety assessment

The supplier has made an assessment of chemical safety

SECTION 16. Other information

16.1. Other information

Description of the hazard statements exposed to point 3
H410 = Very toxic to aquatic life with long lasting effects.
H315 = Causes skin irritation.
H319 = Causes serious eye irritation.
H336 = May cause drowsiness or dizziness.
H411 = Toxic to aquatic life with long lasting effects.
H317 = May cause an allergic skin reaction.
H400 = Very toxic to aquatic life.
H226 = Flammable liquid and vapour.
H304 = May be fatal if swallowed and enters airways.
H318 = Causes serious eye damage.
H361d = Suspected of damaging the unborn child.
H412 = Harmful to aquatic life with long lasting effects.
H335 = May cause respiratory irritation.
H302 = Harmful if swallowed.
H225 = Highly flammable liquid and vapour.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008

[CLP]:

Classification according to Regulation (EC) Nr. 1272/2008

H317 - May cause an allergic skin reaction. Classification procedure: Calculation method
H319 - Causes serious eye irritation. Classification procedure: Calculation method
H411 - Toxic to aquatic life with long lasting effects. Classification procedure: Calculation method

Main normative references:
Directive 1999/45/EC
Directive 2001/60/EC
Regulation (EC) No 1272/2008
Regulation (EU) No 453/2010
Regulation (EC) No 790/2009 (1st ATP CLP)
Regulation (EU) No 286/2011 (2nd ATP CLP)
Regulation (EU) No 618/2012 (3rd ATP CLP)
Regulation (EU) No 487/2013 (4th ATP CLP)
Regulation (EU) No 944/2013 (5th ATP CLP)
Regulation (EU) No 605/2014 (6th ATP CLP)
Regulation (EU) 2015/1221 (7th ATP CLP)
Regulation (EU) 2016/918 (8th ATP CLP)
Regulation (EU) 2016/1179 (9th ATP CLP)
Regulation (EU) 2017/776 (10th ATP CLP)
Regulation (EU) 2018/669 (11th ATP CLP)
Regulation (EU) 2019/521 (12th ATP CLP)
Delegated Regulation (EU) 2018/1480 (13th ATP CLP)
Delegated Regulation (EU) 2020/217 (14th ATP CLP)
Delegated Regulation (EU) 2020/1182 (15th ATP CLP)
Delegated Regulation (EU) 2021/643 (16th ATP CLP)
Delegated Regulation (EU) 2021/849 (17th ATP CLP)
Delegated Regulation (EU) 2022/692 (18th ATP CLP)
Delegated Regulation (EU) 2023/707 (Introduction of new hazard and endocrine classes)
Delegated Regulation (EU) 2023/1434 (19th ATP CLP)
Delegated Regulation (EU) 2023/1435 (20th ATP CLP)
Delegated Regulation (EU) 2024/197 (21st ATP CLP)
Delegated Regulation (EU) 2024/2564 (22nd ATP CLP)
Delegated Regulation (EU) 2025/1222 (23rd ATP CLP)
Databases consulted: ECHA (European Chemicals Agency), internal databases of raw materials provided by the respective manufacturers.

Legend of abbreviations and acronyms

(Q)SAR: (Quantitative) Structure-Activity Relationships

ACGIH / TWA: 8-hour time-weighted average

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

AIIC: Australian Inventory of Industrial Chemicals

ASTM: ASTM International (American Society for Testing and Materials)

ATE: Acute Toxicity Estimates

BCF: BioConcentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAO: Cargo Aircraft Only

CAS: Chemical Abstracts Service number

CAV: Poison Control Center

CE: EC number (European inventory of Existing Commercial chemical Substances)

CLP: Regulation (EC) No 1272/2008

CMR: Carcinogenic, mutagenic or toxic for reproduction

COD: Chemical Oxygen Demand

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DIN: German Institute for Standardization standard

DMEL: Derived Minimal Effect Level

DNEL: Derived No-Effect Level

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Effective Concentration to 50% of test population

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

ELx: Loading rate associated with x% response

EmS: Emergency Schedule

ErCx: Concentration associated with x% growth rate response

GefStoffVO: Ordinance on Hazardous Substances, Germany

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

GLP: Good Laboratory Practice

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association

IATA DGR: Dangerous Goods Regulations of the International Air Transport Association

IBC: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

IC50: Inhibitory Concentration to 50% of test population

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the International Civil Aviation Organization

IMDG: International Maritime Dangerous Goods Code

IMO: International Maritime Organization

INCI: International Nomenclature of Cosmetic Ingredients

INDEX: Identification number in Annex VI of CLP

ISO: International Organization for Standardization

IT OEL CMR / Valori limite 8 ore: 8-hour limit values

IT OEL CMR / Valori limite breve durata: Short-term limit values

IT VLEP / STEL: Limit Values - Short Term

IT VLEP / TWA: Limit Values - 8 Hours

KSt: Explosion coefficient

LC50: Lethal Concentration 50%

LCLo: Lowest Lethal Concentration

LD50: Lethal Dose 50%

LOAEC: Lowest Observed Adverse Effect Concentration

LOAEL: Lowest Observed Adverse Effect Level

LOEC: Lowest Observed Effect Concentration

LOEL: Lowest Observed Effect Level

LTE: Long-term exposure

MAK: Maximum Allowable Concentration

MARPOL: International Convention for the Prevention of Pollution from Ships

NEN: Dutch standard

NOAEL: No Observed Adverse Effect Level

NOEC: No Observed Effect Concentration

NOEL: No Observed Effect Level

NOELR: No Observed Effect Loading Rate

OCSE (OECD): Organisation for Economic Co-operation and Development

OEL: Occupational Exposure Limit

OPPTS: Office of Pollution Prevention and Toxics

PBT: Persistent, Bioaccumulative and Toxic

PEC: Predicted Effect Concentration

PEL: Permissible Exposure Limit

PMT: Persistent, Mobile and Toxic

PNEC: Predicted No-Effect Concentration

PNOS: Particulates Not Otherwise Specified

REACH: Regulation (EC) No 1907/2006

RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail

SADT: Self-Accelerating Decomposition Temperature

SPM: Synthetic Polymer Microparticles

STA (ATE): Acute Toxicity Estimate

STE: Short-term exposure

STOT: Specific Target Organ Toxicity

SVHC: Substance of Very High Concern

ThOD: Theoretical Oxygen Demand

TLV: Threshold Limit Value

TLV CEILING: Concentration that should not be exceeded during any part of the working exposure

TWA STEL: Short-term exposure limit

TWATLV: Threshold Limit Value - Time Weighted Average (8-hour day)

UVCB: Substances of Unknown or Variable composition, Complex reaction products or Biological materials

VOC: Volatile Organic Compound

vPvB: Very Persistent and Very Bioaccumulative

vPvM: Very Persistent and Very Mobile

VwVwS: Administrative Regulation on Substances Hazardous to Waters

WGK: Water Hazard Class (Germany)

** The information contained herein is based on our knowledge at the date above.
Related solely to the product and do not constitute a guarantee of a particular quality.
It is the duty of the user to ensure that these are appropriate and complete information regarding the specific use intended.
This data sheet cancels and replaces any previous edition.