

Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH

This Safety Data Sheet cancels and replaces all preceding SDS for this product.

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

1.1. Product identifier

Code: CM1006
Product name: FR AQQUA
Chemical name and synonym: Essence in hydro-alcoholic solution
UFI: 3E00-G0GU-G00J-Y5TC

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

Intended use: Perfume for the environment

Identified Uses	Industrial	Professional	Consumer
Consumer use		✓	✓
Uses Advised Against			

Not to be used as a personal perfume.

1.3. Details of the supplier of the safety data sheet

Name: CULTI MILANO SpA
Full address: Via dell'Aprica, 12
District and Country: 20158 Milano (MI)
Italy
Tel. +39 02/49784974
Fax +39 02/49789135

e-mail address of the competent person

responsible for the Safety Data Sheet: culti@culti.com

1.4. Emergency telephone number

For urgent inquiries refer to

CULTI MILANO SpA - Tel. +39 02/49784974 (Contact from Monday to Friday from 8.30 / 12.30 AM- 1.30 / 6.00 PM)

ITALIAN POISON CENTER

Ospedale Niguarda Cà Granda - Milano Tel. +39 02/66101029

CAV Centro Nazionale Informazione Tossicologica - Pavia Tel. +39 0382/24444

Centro Antiveleni Bergamo - +39 80011858 (CAV Ospedali Riuniti - Bergamo)

Centro Antiveleni Verona - +39 800011858 (Azienda Ospedaliera Integrata - Verona)

Centro Antiveleni Firenze - Tel. +39 055/7947819 (Azienda Ospedaliera 'Careggi' U.O. Tossicologia Medica-Firenze)

Centro Antiveleni Roma - Tel. +39 06/3054343 (CAV Policlinico Gemelli - Roma)

Centro Antiveleni Roma - Tel. +39 06/49978000 (CAV Policlinico Umberto I - Roma)

Centro Antiveleni Roma - Tel. +39 06/68593726 (CAV Osp. Pediatrico 'Bambino Gesù' DEA - Roma)

Centro Antiveleni Napoli - Tel. +39 081/7472870 (CAV Ospedale Cardarelli - Napoli)

Centro Antiveleni Foggia - Tel. +39 800183459 (CAV Az. Osp. Univ. Foggia - Foggia)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Flammable liquid, category 2

H225

Highly flammable liquid and vapour.

Eye irritation, category 2

H319

Causes serious eye irritation.

Skin sensitization, category 1B

H317

May cause an allergic skin reaction.

Hazardous to the aquatic environment, chronic toxicity, category 2

H411

Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words:

Danger

Hazard statements:

H225

Highly flammable liquid and vapour.

H319

Causes serious eye irritation.

H317

May cause an allergic skin reaction.

H411

Toxic to aquatic life with long lasting effects.

Precautionary statements:

P102

Keep out of reach of children.

P210

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280

Wear protective gloves/ protective clothing / eye protection / face protection.

P370+P378

In case of fire: use chemical extinguisher to extinguish.

P273

Avoid release to the environment.

P391

Collect spillage.

Contains:

Acetyl cedrene

Ethanone, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphtalenyl)-

Methyl-3,4-methylene-dioxycinnamaldehyde

Coumarin

Piperonal

Bicyclo(3.1.1)Heptane, 6,6-Dimethyl-2-Methylene-, (1s)-

Linalool

(R)-P-MENTA-1,8-DIENE

Linalyl acetate

PACK2 The packing must have tactile indications of danger for blind people.

2.3. Other hazardsOn the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.The product does not contain substances with endocrine disrupting properties in concentration \geq 0.1%.**SECTION 3. Composition/information on ingredients****3.2. Mixtures**

Contains:

FR AQQUA

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
ETHANOL		
CAS 64-17-5	$86 \leq x < 90$	Flam. Liq. 2 H225, Eye Irrit. 2 H319
EC 200-578-6		
INDEX 603-002-00-5		
REACH Reg. 01-2119457610-43-0000		
Ethanone, 1- (1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphtalenyl) -		
CAS 54464-57-2	$2 \leq x < 2,5$	Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Chronic 1 H410 M=1
EC 259-174-3		
INDEX -		
REACH Reg. 01-2119489989-04-0000		
Acetyl cedrene		
CAS 32388-55-9	$1 \leq x < 1,5$	Skin Sens. 1B H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
EC 251-020-3		
INDEX -		
REACH Reg. 01-2119969651-28-0000		
6-acetyl-1,1,2,4,4,7-hexamethyl tetralin		
CAS 1506-02-1	$0,6 \leq x < 0,7$	Acute Tox. 4 H302, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1 LD50 Oral: 920 mg/kg
EC 216-133-4		
INDEX -		
REACH Reg. 01-2119539433-40-0000		
(R)-P-MENTHA-1,8-DIENE		
CAS 5989-27-5	$0,45 \leq x < 0,5$	Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 3 H412
EC 227-813-5		
INDEX 601-096-00-2		
REACH Reg. 01-2119529223-47		
Linalyl acetate		
CAS 115-95-7	$0,45 \leq x < 0,5$	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1B H317
EC 204-116-4		
INDEX -		
REACH Reg. 01-2119983608-21-0000		
1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylcyclopenta (g) -2-benzopyran (HHCB)		
CAS 1222-05-5	$0,45 \leq x < 0,5$	Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
EC 214-946-9		
INDEX -		
REACH Reg. 01-2119488227-29-0000		
Linalool		
CAS 78-70-6	$0,25 \leq x < 0,3$	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1B H317
EC 201-134-4		
INDEX 603-235-00-2		
REACH Reg. 01-2119474016-42-0000		

Bicyclo (3.1.1) Heptane, 6,6-Dimethyl-2-Methylene -, (1s) -

CAS 18172-67-3

 $0,15 \leq x < 0,2$

Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1

EC 242-060-2

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Coumarin

CAS 91-64-5

 $0,15 \leq x < 0,2$

Acute Tox. 4 H302, Skin Sens. 1B H317

EC 202-086-7

STA Oral: 500 mg/kg

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REACH Reg. 01-2119949300-45-0000

Methyl-3,4-methylene-dioxydrocinnamaldehyde

CAS 1205-17-0

 $0,15 \leq x < 0,2$

Repr. 2 H361, Skin Sens. 1B H317, Aquatic Chronic 2 H411

EC 214-881-6

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REACH Reg. 01-2120740119-58

Piperonal

CAS 120-57-0

 $0,15 \leq x < 0,2$

Skin Sens. 1B H317

EC 204-409-7

INDEX -

REACH Reg. 01-2119983608-21-0000

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures**4.1. Description of first aid measures**

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

SECTION 5. Firefighting measures**5.1. Extinguishing media****SUITABLE EXTINGUISHING EQUIPMENT**

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

FRA
GBR

France
United Kingdom
TLV-ACGIH

Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
EH40/2005 Workplace exposure limits (Fourth Edition 2020)
ACGIH 2021

ETHANOL**Threshold Limit Value**

Threshold Limit Value						
Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLEP	FRA	1900	1000	9500	5000	
WEL	GBR	1920	1000			
TLV-ACGIH				1884	1000	
Predicted no-effect concentration - PNEC						
Normal value in fresh water				0,96	mg/l	
Normal value in marine water				0,79	mg/l	
Normal value for fresh water sediment				3,6	mg/kg/d	
Normal value for marine water sediment				2,9	mg/kg/d	
Normal value for water, intermittent release				2,75	mg/l	
Normal value of STP microorganisms				580	mg/l	

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation				950 mg/m3		1884 mg/m3		
Skin								343 mg/kg/d

Ethanone, 1- (1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphtalenyl) -**Predicted no-effect concentration - PNEC**

Normal value in fresh water	0,0044	mg/l
Normal value in marine water	440	ng/L
Normal value for fresh water sediment	3,73	mg/kg/d
Normal value for marine water sediment	0,75	mg/kg/d
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	2,7	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation				9 mg/m3				30 mg/m3
Skin				17,2 mg/kg bw/d				28,7 mg/kg bw/d

Acetyl cedrene**Predicted no-effect concentration - PNEC**

Normal value in fresh water	0,00174	mg/l
Normal value in marine water	174	ng/L
Normal value for fresh water sediment	24,4	mg/kg/d
Normal value for marine water sediment	2,44	mg/kg/d
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	4,87	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

Effects on consumers				Effects on workers			
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Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,167 mg/kg bw/d				
Inhalation				0,290 mg/m3				1,17 mg/m3
Skin				0,167 mg/kg bw/d				0,333 mg/kg bw/d

6-acetyl-1,1,2,4,4,7-hexamethyl tetralin

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,0022	mg/l
Normal value in marine water	220	ng/L
Normal value for fresh water sediment	1,72	mg/kg/d
Normal value for marine water sediment	0,345	mg/kg/d
Normal value of STP microorganisms	2,2	mg/l
Normal value for the terrestrial compartment	0,0099	mg/kg/d

Health - Derived no-effect level - DNEL / DMELEffects on
consumersEffects on
workers

Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,0125 mg/kg bw/d				
Inhalation				0,0435 mg/m3				0,175 mg/m3
Skin				0,305 mg/kg bw/d				0,610 mg/kg bw/d

1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylcyclopenta (g) -2-benzopyran (HHCB)

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,0068	mg/l
Normal value in marine water	440	ng/L
Normal value for fresh water sediment	2	mg/kg/d
Normal value for marine water sediment	0,394	mg/kg/d
Normal value of STP microorganisms	1	mg/l
Normal value for the terrestrial compartment	1,5	mg/kg/d

Health - Derived no-effect level - DNEL / DMELEffects on
consumersEffects on
workers

Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				2,3 mg/kg bw/d				
Inhalation				4 mg/m3				13,5 mg/m3
Skin				22 mg/kg bw/d				36,7 mg/kg bw/d

Linalyl acetate

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,011	mg/l
Normal value in marine water	0,0011	mg/l
Normal value for fresh water sediment	0,609	mg/kg/d
Normal value for marine water sediment	0,0609	mg/kg/d
Normal value of STP microorganisms	1	mg/l
Normal value for the terrestrial compartment	0,115	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,200 mg/kg bw/d				
Inhalation				0,680 mg/m3				2,75 mg/m3
Skin				1,25 mg/kg bw/d				2,5 mg/kg bw/d

Linalool

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,2	mg/l
Normal value in marine water	0,02	mg/l
Normal value for fresh water sediment	2,22	mg/kg/d
Normal value for marine water sediment	0,222	mg/kg/d
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,327	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				2,49 mg/kg bw/d				
Inhalation				4,33 mg/m3				24,58 mg/m3
Skin			1,5 mg/cm2	1,25 mg/kg bw/d				3,5 mg/kg bw/d

Piperonal

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,0025	mg/l
Normal value in marine water	250	ng/L
Normal value for fresh water sediment	0,01195	mg/kg/d
Normal value for marine water sediment	0,0012	mg/kg/d
Normal value for water, intermittent release	0,025	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	840	ng/Kg/d
Normal value for the atmosphere	NPI	

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,375 mg/kg bw/d				
Inhalation				1,3 mg/m3				5,29 mg/m3
Skin				0,375 mg/kg bw/d				0,750 mg/kg bw/d

Methyl-3,4-methylene-dioxycinnamaldehyde

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,0053	mg/l
Normal value in marine water	530	ng/L

Normal value for fresh water sediment	0,0569	mg/kg/d
Normal value for marine water sediment	0,00569	mg/kg/d
Normal value for water, intermittent release	0,053	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,00826	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,170 mg/kg bw/d				
Inhalation				0,290 mg/m3				1,2 mg/m3
Skin				0,083 mg/kg bw/d				0,170 mg/kg bw/d

Coumarin

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,019	mg/l
Normal value in marine water	0,0019	mg/l
Normal value for fresh water sediment	0,15	mg/kg/d
Normal value for marine water sediment	0,015	mg/kg/d
Normal value of STP microorganisms	6,4	mg/l
Normal value for the terrestrial compartment	0,018	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation				1,69 mg/m3				6,78 mg/m3
Skin				0,390 mg/kg bw/d				0,790 mg/kg bw/d

Bicyclo (3.1.1) Heptane, 6,6-Dimethyl-2-Methylene -, (1s) -

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,001	mg/l
Normal value in marine water	0,000001	mg/l
Normal value for fresh water sediment	0,337	mg/kg/d
Normal value for marine water sediment	0,0337	mg/kg/d
Normal value of STP microorganisms	3,26	mg/l
Normal value for the terrestrial compartment	0,0671	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation				1 mg/m3				5,69 mg/m3
Skin				0,3 mg/kg bw/d				0,8 mg/kg bw/d

Legend:

(C) = CEILING; INHAL = Inhalable Fraction; RESP = Respirable Fraction; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available; NEA = no exposure expected; NPI = no hazard identified.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	Clear liquid	Concentration: 100 % Temperature: 20 °C
Colour	straw yellow	Concentration: 100 % Temperature: 20 °C
Odour	characteristic	Concentration: 100 % Temperature: 20 °C
Odour threshold	Not applicable	
Melting point / freezing point	Not available	
Initial boiling point	80 °C	Concentration: 100 %
Flammability	flammable liquid	Concentration: 100 %
Lower explosive limit	3,5 % (v/v)	

Upper explosive limit	15 % (v/v)	
Flash point	< 23 °C	Concentration: 100 %
Auto-ignition temperature	430 °C	Concentration: 100 %
pH	7	Concentration: 100 % Temperature: 20 °C
Kinematic viscosity	Not available	
Solubility	partially soluble in water	Concentration: 100 % Temperature: 20 °C
Partition coefficient: n-octanol/water	Not available	
Vapour pressure	Not available	
Density and/or relative density	0,82 - 0,84 g/cm ³	Concentration: 100 % Temperature: 20 °C
Relative vapour density	Not available	
Particle characteristics	Not applicable	

9.2. Other information**9.2.1. Information with regard to physical hazard classes**

Information not available

9.2.2. Other safety characteristics

VOC (Directive 2010/75/EU)	87,48 %	-	743,58 g/litre	Concentration: 100 %
VOC (volatile carbon)	45,75 %	-	388,83 g/litre	Concentration: 100 %

SECTION 10. Stability and reactivity**10.1. Reactivity**

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

ETHANOL

Risk of explosion on contact with: alkaline metals,alkaline oxides,calcium hypochlorite,sulphur monofluoride,acetic anhydride,acids,concentrated hydrogen peroxide,perchlorates,perchloric acid,perchloronitrile,mercury nitrate,nitric acid,silver,silver nitrate,ammonia,silver oxide,ammonia,strong oxidising agents,nitrogen dioxide.May react dangerously with: bromoacetylene,chlorine acetylene,bromine trifluoride,chromium trioxide,chromyl chloride,fluorine,potassium tert-butoxide,lithium hydride,phosphorus trioxide,black platinum,zirconium (IV) chloride,zirconium (IV) iodide.Forms explosive mixtures with: air.

10.4. Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

ETHANOL

Avoid exposure to: sources of heat,naked flames.

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

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

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture:	Not classified (no significant component)
ATE (Oral) of the mixture:	Not classified (no significant component)
ATE (Dermal) of the mixture:	Not classified (no significant component)

ETHANOL

LD50 (Oral):	> 5000 mg/kg Rat
LC50 (Inhalation vapours):	120 mg/l/4h Pimephales promelas

Ethanone, 1- (1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphtalenyl) -

LD50 (Oral):	5000 mg/kg Rat
LD50 (Dermal):	5000 mg/kg Rat

Acetyl cedrene

LD50 (Oral):	4500 mg/kg Rat
LD50 (Dermal):	5000 mg/kg Rabbit

6-acetyl-1,1,2,4,4,7-hexamethyl tetralin

LD50 (Oral):	920 mg/kg Rat
LD50 (Dermal):	7940 mg/kg Rat

1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylcyclopenta (g) -2-benzopyran (HHCB)

LD50 (Oral):	2000 mg/kg Rat
LD50 (Dermal):	2000 mg/kg Rabbit

Linalyl acetate

LD50 (Oral):	9000 mg/kg Rat
LD50 (Dermal):	5000 mg/kg Rabbit

Linalool

LD50 (Oral):	2790 mg/kg Rat
LD50 (Dermal):	5610 mg/kg Rabbit

Piperonal

LD50 (Oral):	2700 mg/kg Rat
LD50 (Dermal):	5000 mg/kg Rat

FR AQQUA

Methyl-3,4-methylene-dioxydrocinnamaldehyde

LD50 (Oral):

3362 mg/kg Rat

LD50 (Dermal):

2000 mg/kg Rabbit

Coumarin

LD50 (Oral):

293 mg/kg Rat

STA (Oral):

500 mg/kg estimate from table 3.1.2 of Annex I of the CLP
(figure used for calculation of the acute toxicity estimate of the mixture)

Bicyclo (3.1.1) Heptane, 6,6-Dimethyl-2-Methylene -, (1s) -

LD50 (Oral):

> 5000 mg/kg Rat

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

Respiratory sensitization

Information not available

Skin sensitization

Information not available

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

Adverse effects on sexual function and fertility

Information not available

Adverse effects on development of the offspring

Information not available

Effects on or via lactation

Information not available

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

SECTION 12. Ecological information

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it have negative effects on acquatic environment.

12.1. Toxicity

(R)-P-MENTHA-1,8-DIENE

LC50 - for Fish 35 mg/l/96h Oncorhynchus mykiss

EC50 - for Crustacea 69,6 mg/l/48h Daphnia pulex

1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylcyclopenta (g) -2-benzopyran (HHCB)

LC50 - for Fish 0,95 mg/l/96h

EC50 - for Crustacea 0,194 mg/l/48h

Chronic NOEC for Fish 0,068 mg/L (36 days)

Chronic NOEC for Algae / Aquatic Plants 0,201 mg/L (72 h)

6-acetyl-1,1,2,4,4,7-hexamethyl tetralin

LC50 - for Fish 1,49 mg/l/96h

Chronic NOEC for Fish 0,035 mg/l 34 days

Chronic NOEC for Crustacea 0,022 mg/l 6 days

Chronic NOEC for Algae / Aquatic Plants 0,404 mg/l freshwater algae

Acetyl cedrene

LC50 - for Fish > 2,3 mg/l/96h

Chronic NOEC for Crustacea 0,087 mg/l 21 days

Chronic NOEC for Algae / Aquatic Plants 1,07 mg/l Algae

Linalool

LC50 - for Fish 27,8 mg/l/96h

EC50 - for Crustacea 59 mg/l/48h

EC10 for Algae / Aquatic Plants 54,3 mg/l/4d

Methyl-3,4-methylene-dioxydrocinnamaldehyde

LC50 - for Fish 5,3 mg/l/96h

EC50 - for Algae / Aquatic Plants 28 mg/l/72h

FR AQQUA

Chronic NOEC for Algae / Aquatic Plants	6,25 mg/l
Ethanone, 1- (1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphtalenyl) -	
LC50 - for Fish	1,3 mg/l/96h
Chronic NOEC for Fish	> 0,16 mg/l 30 days
Chronic NOEC for Crustacea	> 0,028 mg/l 21 days
Chronic NOEC for Algae / Aquatic Plants	2,6 mg/l freshwater algae

Coumarin	
LC50 - for Fish	> 1,324 mg/l/96h
Chronic NOEC for Fish	8,012 mg/l 30 days
Chronic NOEC for Crustacea	0,5 mg/l 21 days
Chronic NOEC for Algae / Aquatic Plants	0,431 mg/l 72h

Linalyl acetate	
LC50 - for Fish	11 mg/l/96h
EC50 - for Crustacea	59 mg/l/48h
EC50 - for Algae / Aquatic Plants	68 mg/l/72h

Piperonal	
LC50 - for Fish	2,5 mg/l/96h
EC50 - for Algae / Aquatic Plants	31 mg/l/72h
Chronic NOEC for Algae / Aquatic Plants	4,8 mg/l freshwater algae

Bicyclo (3.1.1) Heptane, 6,6-Dimethyl-2-Methylene -, (1s) -	
LC50 - for Fish	> 0,502 mg/l/96h

12.2. Persistence and degradability**(R)-P-MENTHA-1,8-DIENE**

Solubility in water	0,1 - 100 mg/l
Rapidly degradable	

ETHANOL

Solubility in water	1000 - 10000 mg/l
Rapidly degradable	

1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylcyclopenta (g) -2-benzopyran (HHCB)

Solubility in water	1,65 mg/l @ 25°C
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NOT rapidly degradable

6-acetyl-1,1,2,4,4,7-hexamethyl tetralin

Solubility in water	1,25 mg/l
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Entirely degradable

FR AQQUA

Acetyl cedrene

Solubility in water 6 mg/l @ 23°C

NOT rapidly degradable

Linalool

Solubility in water 1,56 g/l

Rapidly degradable

Methyl-3,4-methylene-
dioxydrocinnamaldehyde

Solubility in water 934 mg/l

Entirely degradable

Ethanone, 1- (1,2,3,4,5,6,7,8-Octahydro-
2,3,8,8-Tetramethyl-2-Naphtalenyl) -
Solubility in water

2,68 mg/l

Rapidly degradable

Coumarin

Solubility in water 1,9 g/l

Rapidly degradable

Linalyl acetate

Solubility in water 30 mg/l

Rapidly degradable

Piperonal

Solubility in water 1,4 g/l

Rapidly degradable

Bicyclo (3.1.1) Heptane, 6,6-Dimethyl-2-
Methylene -, (1s) -

Solubility in water 6,95 mg/l

Rapidly degradable

12.3. Bioaccumulative potential

(R)-P-MENTHA-1,8-DIENE

Partition coefficient: n-octanol/water 4,38

BCF 1022

ETHANOL

Partition coefficient: n-octanol/water -0,35

1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-
hexamethylcyclopenta (g) -2-benzopyran
(HHCB)

Partition coefficient: n-octanol/water 5,3 Log Kow @ 25°C

BCF 1584 L/kg ww aquatic/sediment

6-acetyl-1,1,2,4,4,7-hexamethyl tetralin

Partition coefficient: n-octanol/water 5,4 Log Kow
BCF 597 L/kg ww

Acetyl cedrene
Partition coefficient: n-octanol/water 5,9 Log Kow
BCF 3920 dimensionless

Linalool
Partition coefficient: n-octanol/water 2,9 Log Kow @ 20°C

Methyl-3,4-methylene-
dioxydrocinnamaldehyde
Partition coefficient: n-octanol/water 2,4 Log Kow @ 25°C

Ethanone, 1- (1,2,3,4,5,6,7,8-Octahydro-
2,3,8,8-Tetramethyl-2-Naphtalenyl) -
Partition coefficient: n-octanol/water 5,65 Log Kow
BCF 5361 L/kg ww

Coumarin
Partition coefficient: n-octanol/water 1,39 Log Kow @ 25°C

Linalyl acetate
Partition coefficient: n-octanol/water 3,9 Log Kow
BCF 174 L/kg ww

Piperonal
Partition coefficient: n-octanol/water 1,2 Log Kow

Bicyclo (3.1.1) Heptane, 6,6-Dimethyl-2-
Methylene -, (1s) -
Partition coefficient: n-octanol/water 4,4 Log Kow
BCF 838 L/kg ww

12.4. Mobility in soil

Methyl-3,4-methylene-
dioxydrocinnamaldehyde
Partition coefficient: soil/water 71,3 Koc @ 20°C

Piperonal
Partition coefficient: soil/water 11,8 Koc @ 20°C

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.

12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. Other adverse effects

Information not available.

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

14.1. UN number or ID number

ADR / RID, IMDG, IATA: 1266

14.2. UN proper shipping name

ADR / RID: PERFUMERY PRODUCTS

IMDG: PERFUMERY PRODUCTS (Ethanone, 1- (1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphtalenyl) -)

IATA: PERFUMERY PRODUCTS

14.3. Transport hazard class(es)

ADR / RID: Class: 3 Label: 3

IMDG: Class: 3 Label: 3

IATA: Class: 3 Label: 3



14.4. Packing group

ADR / RID, IMDG, IATA: II

14.5. Environmental hazards

ADR / RID: Environmentally
Hazardous

IMDG: Marine Pollutant

IATA: NO



For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 33	Limited Quantities: 5 L	Tunnel restriction code: (D/E)
	Special provision: 163, 640D		
IMDG:	EMS: F-E, S-D	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 60 L	Packaging instructions: 364
	Pass.:	Maximum quantity: 5 L	Packaging instructions: 353
	Special provision:	A3, A72	

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant.

SECTION 15. Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Seveso Category - Directive 2012/18/EU: P5c-E2

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product
Point 3 - 40

Contained substance
Point 75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors
Not applicable

Substances in Candidate List (Art. 59 REACH)
On the basis of available data, the product does not contain any SVHC in percentage \geq than 0,1%.

Substances subject to authorisation (Annex XIV REACH)
None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:
None

Substances subject to the Rotterdam Convention:
None

Substances subject to the Stockholm Convention:
None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 2	Flammable liquid, category 2
Repr. 2	Reproductive toxicity, category 2
Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
Skin Sens. 1B	Skin sensitization, category 1B
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
H225	Highly flammable liquid and vapour.
H361	Suspected of damaging fertility or the unborn child.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
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.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
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9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
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16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
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18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
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- The Merck Index. - 10th Edition

- Handling Chemical Safety

- INRS - Fiche Toxicologique (toxicological sheet)

- Patty - Industrial Hygiene and Toxicology

- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition

- IFA GESTIS website

- ECHA website

- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 08 / 09 / 11 / 12 / 14 / 15 / 16.