



Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 17/02/2025 Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Trade name : TURRÓN
UFI : X1GH-QH02-MMKX-AYN9
Product code :
Type of product : Perfumes, fragrances
Product group : Trade product

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

Relevant identified uses

Main use category : Professional use, Industrial use
Industrial/Professional use spec : Industrial
For professional use only
Use of the substance/mixture : Perfumes, fragrances
Function or use category : Odour agents

1.3. Details of the supplier of the safety data sheet

RUTA de la CERA S.L.
B66957648
Cerdanya 35 nave 7, P.I. La Borda
08140 CALDES DE MONTBUI
BARCELONA
+34 93 688 31 07
info@rutadelacera.es

1.4. Emergency telephone number

Emergency number +34 91 562 04 20 :

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 4 H302
Skin sensitisation, Category 1 H317
Hazardous to the aquatic environment – Acute Hazard, Category 1 H400
Hazardous to the aquatic environment – Chronic Hazard, Category 2 H411
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Harmful if swallowed. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects. May cause an allergic skin reaction.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07



GHS09

Signal word (CLP)

: Warning

Contains	: Benzyl benzoate; Benzyl alcohol; 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone; Hexyl cinnamic aldehyde; Acetophenone; Ethyl maltol; Benzyl salicylate; Vertenex; Triplal (Vertocitral); d-Limonene
Hazard statements (CLP)	: H302 - Harmful if swallowed. H317 - May cause an allergic skin reaction. H410 - Very toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P272 - Contaminated work clothing should not be allowed out of the workplace. P273 - Avoid release to the environment. P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

2.3. Other hazards

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Bis(2-ethylhexyl) adipate substance with national workplace exposure limit(s) (PL)	CAS-No.: 103-23-1 EC-No.: 203-090-1 REACH-no: 01-2119439699-19	19.8 – 39.65	Not classified
benzyl benzoate	CAS-No.: 120-51-4 EC-No.: 204-402-9 EC Index-No.: 607-085-00-9 REACH-no: 01-2119976371-33	17.7 – 35.395	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Vanillin	CAS-No.: 121-33-5 EC-No.: 204-465-2 REACH-no: 01-2119516040-60	1.995 – 4.2075	Eye Irrit. 2, H319
benzyl alcohol substance with national workplace exposure limit(s) (BG, CZ, DE, FI, LT, LV, PL, SI, CH)	CAS-No.: 100-51-6 EC-No.: 202-859-9 EC Index-No.: 603-057-00-5 REACH-no: 01-2119492630-38	2 – 4	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone	CAS-No.: 54464-57-2 EC-No.: 259-174-3 REACH-no: 01-2119489989-04	1.8 – 3.5	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 1, H410
Hexyl cinnamic aldehyde	CAS-No.: 101-86-0 EC-No.: 202-983-3 REACH-no: 01-2119533092-50	1.5 – 3	Skin Sens. 1, H317 Aquatic Chronic 2, H411



Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ethylene brassylate	CAS-No.: 105-95-3 EC-No.: 203-347-8 REACH-no: 01-2119976314-33	1 – 2	Aquatic Chronic 2, H411
Acetoin	CAS-No.: 513-86-0 EC-No.: 208-174-1	0.9 – 1.8	Flam. Liq. 3, H226 STOT RE 2, H373
acetophenone substance with national workplace exposure limit(s) (BE, BG, DK, ES, FI, HU, IE, LT, LV, PL, PT, RO)	CAS-No.: 98-86-2 EC-No.: 202-708-7 EC Index-No.: 606-042-00-1 REACH-no: 01-2119533169-37	0.6 – 1.25	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319
Anisic aldehyde	CAS-No.: 123-11-5 EC-No.: 204-602-6 REACH-no: 01-2119977101-43	0.5 – 1	Aquatic Chronic 3, H412
Ethyl maltol	CAS-No.: 4940-11-8 EC-No.: 225-582-5	0.5 – 1	Acute Tox. 4 (Oral), H302
Sandal Mysore Core	CAS-No.: 28219-60-5 EC-No.: 248-907-2	0.4 – 0.8	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Benzaldehyde substance with national workplace exposure limit(s) (BG, FI, HU, LT, LV, PL)	CAS-No.: 100-52-7 EC-No.: 202-860-4 EC Index-No.: 605-012-00-5 REACH-no: 01-2119455540-44	0.4 – 0.75	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361 STOT SE 3, H335
Benzyl salicylate	CAS-No.: 118-58-1 EC-No.: 204-262-9 EC Index-No.: 607-754-00-5 REACH-no: 01-2119969442-31	0.1 – 0.2	Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 3, H412
Vertenex	CAS-No.: 32210-23-4 EC-No.: 250-954-9 REACH-no: 01-2119976286-24	0.1 – 0.2	Skin Sens. 1B, H317
Triplal (Vertocitral)	CAS-No.: 68039-49-6 EC-No.: 268-264-1 EC Index-No.: 605-043-00-4	0.1 – 0.2	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412
(R)-p-mentha-1,8-diene; d-limonene substance with national workplace exposure limit(s) (DE, ES, FI, SI, NO, CH)	CAS-No.: 5989-27-5 EC-No.: 205-341-0 EC Index-No.: 601-096-00-2 REACH-no: 01-2119493353-35	0.1 – 0.1056	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 3, H412
dipentene; limonene substance with national workplace exposure limit(s) (EE, LT, SE, NO)	CAS-No.: 138-86-3 EC-No.: 205-341-0	0 – 0.0114	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
.alpha.-Pinene substance with national workplace exposure limit(s) (BE, EE, ES, LT, PT, SE, NO)	CAS-No.: 80-56-8 EC-No.: 201-291-9	0 – 0.0042	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
citral substance with national workplace exposure limit(s) (BE, ES, IE, PL, PT)	CAS-No.: 5392-40-5 EC-No.: 226-394-6 EC Index-No.: 605-019-00-3 REACH-no: 01-2119462829-23	0 – 0.0015	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see Get medical advice/attention. on this label). If skin irritation occurs: Get medical advice/attention. Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Do NOT induce vomiting. Obtain emergency medical attention. Rinse mouth. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after skin contact	: May cause an allergic skin reaction.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Sand. Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire	: Toxic fumes may be released.
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5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
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Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.
Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container closed when not in use. Store in a well-ventilated place. Keep cool.
Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.
Storage temperature : 25 °C
Storage area : Store in a well-ventilated place. Store away from heat.
Special rules on packaging : Store in a closed container.
Packaging materials : Do not store in corrodable metal.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

acetophenone (98-86-2)

Ireland - Occupational Exposure Limits

OEL TWA	49 mg/m ³
	10 ppm
OEL STEL	147 mg/m ³ (calculated)
	30 ppm (calculated)

citral (5392-40-5)

Ireland - Occupational Exposure Limits

OEL TWA	5 ppm
OEL STEL	15 ppm (calculated)

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Chemical goggles or safety glasses. Safety glasses

Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Wear protective gloves.

Respiratory protection

Respiratory protection:

Wear appropriate mask

Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Conforms to standard.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not applicable
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: > 93.3 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: Not available
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 0.004042953 mm Hg (calculated value)
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

Other safety characteristics

VOC content : 5.451 % (calculated value)(CARB VOC) (%w/w)

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Harmful if swallowed.



Acute toxicity (dermal) : Not classified
 Acute toxicity (inhalation) : Not classified

TURRÓN	
ATE CLP (oral)	1233.83 mg/kg bodyweight
Bis(2-ethylhexyl) adipate (103-23-1)	
LD50 oral rat	5600 mg/kg (Source: NLM_CIP)
LD50 dermal rabbit	8410 mg/kg (Source: NLM_CIP)
LC50 Inhalation - Rat	> 5.7 mg/l/4h
benzyl benzoate (120-51-4)	
LD50 oral rat	> 2000 mg/kg (Source: ECHA_API)
LD50 oral	1160 mg/kg
LD50 dermal rabbit	4000 mg/kg (Source: NLM_CIP)
Vanillin (121-33-5)	
LD50 dermal rabbit	> 5010 mg/kg (Source: OECD_SIDS)
LD50 dermal	2600 mg/kg
benzyl alcohol (100-51-6)	
LD50 oral rat	1230 mg/kg (Source: NLM_CIP)
LD50 oral	1570 mg/kg
Hexyl cinnamic aldehyde (101-86-0)	
LD50 oral rat	3100 mg/kg (Source: NLM_CIP)
LD50 oral	3100 mg/kg
LD50 dermal rabbit	> 3000 mg/kg (Source: EPA_HPVP)
LC50 Inhalation - Rat	> 5 mg/l/4h
Ethylene brassylate (105-95-3)	
LD50 oral rat	> 5000 mg/kg (Source: ECHA)
LD50 dermal rabbit	> 5000 mg/kg (Source: ECHA)
Acetoin (513-86-0)	
LD50 oral rat	> 5 g/kg (Source: NLM_CIP)
acetophenone (98-86-2)	
LD50 oral rat	2081 mg/kg (Source: ECHA_API)
LD50 dermal rat	3300 mg/kg (Source: ECHA_API)
LC50 Inhalation - Rat	> 2.13 mg/l (Exposure time: 8 h Source: CHEMVIEW)
Anisic aldehyde (123-11-5)	
LD50 oral rat	3210 mg/kg (Source: ECHA)
LD50 oral	3210 mg/kg
LD50 dermal rabbit	> 5000 mg/kg (Source: EPA_HPVP)
LC50 Inhalation - Rat	> 0.32 mg/l (Exposure time: 7 h Source: ECHA)
Ethyl maltol (4940-11-8)	
LD50 oral rat	1150 mg/kg (Source: NLM_CIP)



Ethyl maltol (4940-11-8)	
LD50 oral	1200 mg/kg
LD50 dermal rabbit	> 5000 mg/kg (Source: ECHA_API)
Benzaldehyde (100-52-7)	
LD50 oral rat	1292 mg/kg (Source: JAPAN_GHS)
LD50 dermal rabbit	> 1250 mg/kg (Source: JAPAN_GHS)
LC50 Inhalation - Rat	< 5 mg/l/4h
Benzyl salicylate (118-58-1)	
LD50 oral rat	2227 mg/kg (Source: NLM_CIP)
LD50 oral	2227 mg/kg
LD50 dermal rabbit	> 5000 mg/kg (Source: CHEMVIEW)
Vertenex (32210-23-4)	
LD50 oral rat	5 g/kg (Source: NLM_CIP)
LD50 oral	3370 mg/kg
LD50 dermal rabbit	> 5000 mg/kg (Source: CHEMVIEW)
Triplal (Vertocitral) (68039-49-6)	
LD50 oral	2330 mg/kg
(R)-p-mentha-1,8-diene; d-limonene (5989-27-5)	
LD50 oral rat	4400 mg/kg (Source: CHEMVIEW)
LD50 dermal rabbit	> 5 g/kg (Source: CHEMVIEW)
dipentene; limonene (138-86-3)	
LD50 oral rat	5300 mg/kg (Source: NLM_CIP)
.alpha.-Pinene (80-56-8)	
LD50 oral rat	3700 mg/kg (Source: NLM_CIP)
LD50 dermal rat	> 5000 mg/kg (Source: CHEMVIEW)
citral (5392-40-5)	
LD50 oral rat	4960 mg/kg (Source: NLM_CIP)
LD50 dermal rabbit	2250 mg/kg (Source: NLM_CIP)
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Bis(2-ethylhexyl) adipate (103-23-1)	
IARC group	3 - Not classifiable
(R)-p-mentha-1,8-diene; d-limonene (5989-27-5)	
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified

Benzaldehyde (100-52-7)

STOT-single exposure : May cause respiratory irritation.

STOT-repeated exposure : Not classified

Acetoin (513-86-0)

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

benzyl benzoate (120-51-4)

Viscosity, kinematic : 7.456 mm²/s

(R)-p-mentha-1,8-diene; d-limonene (5989-27-5)

Hydrocarbon : Yes

dipentene; limonene (138-86-3)

Hydrocarbon : Yes

.alpha.-Pinene (80-56-8)

Hydrocarbon : Yes

11.2. Information on other hazards

Other information

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term (acute) : Very toxic to aquatic life.

Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.

Bis(2-ethylhexyl) adipate (103-23-1)

LC50 - Fish [1] : 0.48 – 0.85 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static] Source: EPA)

LC50 - Fish [2] : 0.48 – 0.85 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static] Source: EPA)

EC50 - Crustacea [1] : > 1.6 mg/l (Exposure time: 48 h - Species: Daphnia magna)

EC50 72h - Algae [1] : > 500 mg/l (Species: Desmodesmus subspicatus)

benzyl benzoate (120-51-4)

LC50 - Fish [1] : 2.32 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static] Source: ECHA)

NOEC (chronic) : 0.168 mg/l

Vanillin (121-33-5)

LC50 - Fish [1] : 53 – 61.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)

LC50 - Fish [2] : 88 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)

NOEC (acute) : 10000 mg/kg (Exposure time: 42 Days - Species: Eisenia foetida [soil dry weight])

benzyl alcohol (100-51-6)	
LC50 - Fish [1]	460 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)
LC50 - Fish [2]	10 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static] Source: EPA)
EC50 - Crustacea [1]	23 mg/l (Exposure time: 48 h - Species: water flea)
acetophenone (98-86-2)	
LC50 - Fish [1]	162 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)
LC50 - Fish [2]	155 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)
Ethyl maltol (4940-11-8)	
LC50 - Fish [1]	> 85 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss Source: ECHA)
Benzaldehyde (100-52-7)	
LC50 - Fish [1]	10.6 – 11.8 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through] Source: EPA)
LC50 - Fish [2]	12.69 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static] Source: IUCLID)
Benzyl salicylate (118-58-1)	
LC50 - Fish [1]	1.03 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static] Source: ECHA)
Vertenex (32210-23-4)	
LC50 - Fish [1]	8.6 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [semi-static] Source: ECHA)
(R)-p-mentha-1,8-diene; d-limonene (5989-27-5)	
LC50 - Fish [1]	0.619 – 0.796 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)
LC50 - Fish [2]	35 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss Source: EPA)
.alpha.-Pinene (80-56-8)	
LC50 - Fish [1]	0.28 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: IUCLID)
EC50 - Crustacea [1]	41 mg/l (Exposure time: 48 h - Species: Daphnia magna)
citral (5392-40-5)	
EC50 - Crustacea [1]	7 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 72h - Algae [1]	16 mg/l (Species: Desmodesmus subspicatus)
EC50 96h - Algae [1]	19 mg/l (Species: Desmodesmus subspicatus)
12.2. Persistence and degradability	
TURRÓN	
Persistence and degradability	Not established.
Bis(2-ethylhexyl) adipate (103-23-1)	
Persistence and degradability	Rapidly degradable
benzyl benzoate (120-51-4)	
Persistence and degradability	May cause long-term adverse effects in the environment.
Vanillin (121-33-5)	
Persistence and degradability	Not established.

benzyl alcohol (100-51-6)	
Persistence and degradability	Rapidly degradable
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone (54464-57-2)	
Persistence and degradability	Rapidly degradable
Hexyl cinnamic aldehyde (101-86-0)	
Persistence and degradability	Rapidly degradable
Ethylene brassylate (105-95-3)	
Persistence and degradability	May cause long-term adverse effects in the environment.
Acetoin (513-86-0)	
Persistence and degradability	Rapidly degradable
acetophenone (98-86-2)	
Persistence and degradability	Rapidly degradable
Anisic aldehyde (123-11-5)	
Persistence and degradability	Rapidly degradable
Ethyl maltol (4940-11-8)	
Persistence and degradability	Rapidly degradable
Sandal Mysore Core (28219-60-5)	
Persistence and degradability	Rapidly degradable
Benzaldehyde (100-52-7)	
Persistence and degradability	Rapidly degradable
Benzyl salicylate (118-58-1)	
Persistence and degradability	Rapidly degradable
Vertenex (32210-23-4)	
Persistence and degradability	Rapidly degradable
Triplal (Vertocitral) (68039-49-6)	
Persistence and degradability	Rapidly degradable
(R)-p-mentha-1,8-diene; d-limonene (5989-27-5)	
Persistence and degradability	Rapidly degradable
dipentene; limonene (138-86-3)	
Persistence and degradability	Rapidly degradable
.alpha.-Pinene (80-56-8)	
Persistence and degradability	Rapidly degradable
citral (5392-40-5)	
Persistence and degradability	Rapidly degradable



12.3. Bioaccumulative potential

TURRÓN

Bioaccumulative potential	Not established.
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Bis(2-ethylhexyl) adipate (103-23-1)

BCF - Fish [1]	(27 dimensionless)
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Partition coefficient n-octanol/water (Log Pow)	8.94 (at 25 °C)
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benzyl benzoate (120-51-4)

Partition coefficient n-octanol/water (Log Pow)	3.97 (at 25 °C)
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Bioaccumulative potential	Not established.
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Vanillin (121-33-5)

Partition coefficient n-octanol/water (Log Pow)	1.23 (at 22 °C)
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Bioaccumulative potential	Not established.
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benzyl alcohol (100-51-6)

Partition coefficient n-octanol/water (Log Pow)	1.05
---	------

1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone (54464-57-2)

Partition coefficient n-octanol/water (Log Pow)	5.65 (at 30°C)
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Ethylene brassylate (105-95-3)

Partition coefficient n-octanol/water (Log Pow)	4.3 (at 25 °C (at pH 6.4-7)
---	-----------------------------

Bioaccumulative potential	Not established.
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Acetoin (513-86-0)

Partition coefficient n-octanol/water (Log Pow)	0.1 (at 25 °C (at pH >2-<8)
---	-----------------------------

acetophenone (98-86-2)

Partition coefficient n-octanol/water (Log Pow)	1.63 – 1.65
---	-------------

Anisic aldehyde (123-11-5)

Partition coefficient n-octanol/water (Log Pow)	1.56 (at 25 °C (at pH >7.9-<8.25)
---	-----------------------------------

Ethyl maltol (4940-11-8)

Partition coefficient n-octanol/water (Log Pow)	2.9 (at 25 °C)
---	----------------

Sandal Mysore Core (28219-60-5)

Partition coefficient n-octanol/water (Log Pow)	3.8
---	-----

Benzaldehyde (100-52-7)

BCF - Fish [1]	(no significant bioaccumulation)
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Partition coefficient n-octanol/water (Log Pow)	1.4 (at 25 °C)
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Benzyl salicylate (118-58-1)

Partition coefficient n-octanol/water (Log Pow)	4
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Vertenex (32210-23-4)

Partition coefficient n-octanol/water (Log Pow)	4.8 (at 25 °C)
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Triplal (Vertocitral) (68039-49-6)

Partition coefficient n-octanol/water (Log Pow)	2.6
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(R)-p-mentha-1,8-diene; d-limonene (5989-27-5)

Partition coefficient n-octanol/water (Log Pow)	4.38 (at 37 °C (at pH 7.2))
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.alpha.-Pinene (80-56-8)

Partition coefficient n-octanol/water (Log Pow)	4.1
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citral (5392-40-5)

Partition coefficient n-octanol/water (Log Pow)	2.76 (at 25 °C)
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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

TURRÓN

Other information	Avoid release to the environment.
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benzyl benzoate (120-51-4)

Other information	Avoid release to the environment.
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Vanillin (121-33-5)

Other information	Avoid release to the environment.
-------------------	-----------------------------------

Ethylene brassylate (105-95-3)

Other information	Avoid release to the environment.
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SECTION 13: Disposal considerations

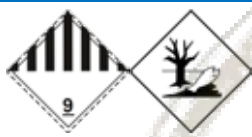
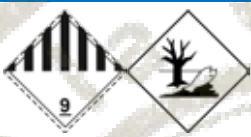
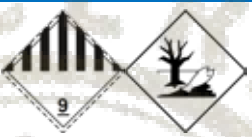
13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecological waste information	: Avoid release to the environment.
HP Code	: HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure. HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082

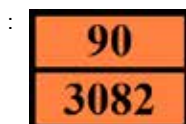
ADR	IMDG	IATA	ADN	RID
14.2. UN proper shipping name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone)	Environmentally hazardous substance, liquid, n.o.s. (1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone)
Transport document description				
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone), 9, III
14.3. Transport hazard class(es)				
9	9	9	9	9
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes EmS-No. (Fire): F-A EmS-No. (Spillage): S-F	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: M6
Special provisions (ADR)	: 274, 335, 375, 601
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Special packing provisions (ADR)	: PP1
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1, TP29
Tank code (ADR)	: LGBV
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13
Hazard identification number (Kemler No.)	: 90

Orange plates



Tunnel restriction code (ADR)

-

Transport by sea

Special provisions (IMDG) : 274, 335, 969
 Limited quantities (IMDG) : 5 L
 Excepted quantities (IMDG) : E1
 Packing instructions (IMDG) : LP01, P001
 Special packing provisions (IMDG) : PP1
 IBC packing instructions (IMDG) : IBC03
 Tank instructions (IMDG) : T4
 Tank special provisions (IMDG) : TP1, TP29
 Stowage category (IMDG) : A

Air transport

PCA Excepted quantities (IATA) : E1
 PCA Limited quantities (IATA) : Y964
 PCA limited quantity max net quantity (IATA) : 30kgG
 PCA packing instructions (IATA) : 964
 PCA max net quantity (IATA) : 450L
 CAO packing instructions (IATA) : 964
 CAO max net quantity (IATA) : 450L
 Special provisions (IATA) : A97, A158, A197, A215
 ERG code (IATA) : 9L

Inland waterway transport

Classification code (ADN) : M6
 Special provisions (ADN) : 274, 335, 375, 601
 Limited quantities (ADN) : 5 L
 Excepted quantities (ADN) : E1
 Carriage permitted (ADN) : T
 Equipment required (ADN) : PP
 Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : M6
 Special provisions (RID) : 274, 335, 375, 601
 Limited quantities (RID) : 5L
 Excepted quantities (RID) : E1
 Packing instructions (RID) : P001, IBC03, LP01, R001
 Special packing provisions (RID) : PP1
 Mixed packing provisions (RID) : MP19
 Portable tank and bulk container instructions (RID) : T4
 Portable tank and bulk container special provisions (RID) : TP1, TP29
 Tank codes for RID tanks (RID) : LGBV
 Transport category (RID) : 3
 Special provisions for carriage – Packages (RID) : W12
 Special provisions for carriage - Loading, unloading and handling (RID) : CW13, CW31
 Colis express (express parcels) (RID) : CE8
 Hazard identification number (RID) : 90

14.7. Maritime transport in bulk according to IMO instruments

Not applicable



SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(a)	Acetoin ; d-Limonene ; Dipentene ; .alpha.- Pinene	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F
3(b)	TURRÓN ; Benzyl benzoate ; Benzyl alcohol ; 1-(1,2,3,4,5,6,7,8- Octahydro-2,3,8,8- tetramethyl-2- naphthalenyl)ethanone ; Hexyl cinnamic aldehyde ; Acetoin ; Acetophenone ; Santal Mysore Core ; Benzaldehyde ; Benzyl salicylate ; Vertenex ; Triplal (Vertocitral) ; d- Limonene ; Dipentene ; .alpha.-Pinene ; Citral	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
3(c)	TURRÓN ; Bis(2 - ethylhexyl) adipate ; Benzyl benzoate ; 1- (1,2,3,4,5,6,7,8- Octahydro-2,3,8,8- tetramethyl-2- naphthalenyl)ethanone ; Hexyl cinnamic aldehyde ; Ethylene brassylate ; Anisic aldehyde ; Santal Mysore Core ; Benzyl salicylate ; Triplal (Vertocitral) ; d-Limonene ; Dipentene ; .alpha.- Pinene	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1
40.	Acetoin ; d-Limonene ; Dipentene ; .alpha.- Pinene	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

VOC Directive (2004/42)

VOC content : 5.451 % (calculated value)(CARB VOC) (%w/w)

Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Other information : None.

Full text of H- and EUH-statements:	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.



Full text of H- and EUH-statements:

H335	May cause respiratory irritation.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.