

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Issue date: 1/5/2018 Revision date: 3/26/2025 Supersedes version of: 2/21/2025 Version: 4.1

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

1.1. Product identifier

Product form : Mixture

Trade name : AMBER NOIR #EU37338F UFI : 904Q-8C0U-2003-6GE2

Product code : EU37338F

Type of product : Perfumes, fragrances
Product group : Trade product

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

1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use

Industrial/Professional use spec : Industrial

For professional use only : Perfumes, fragrances

Use of the substance/mixture : Perfumes, frag Function or use category : Odour agents

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

FRENCH COLOR & FRAGRANCE INTERNATIONAL GmbH GmbH

Mittlerer Weg 35 DE 79424 Auggen

Germany

T 49-7631-931-8900

SDS@frenchcolor.com, www.frenchcolor.com

1.4. Emergency telephone number

Emergency number : 1-800-255-3924; +01-813-248-0585; China:+400-120-0751; Mexico:+01-800-099-0731;

Brazil: +0-800-591-6042; India: +000-800-100-4086

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin sensitisation, Category 1 H317
Hazardous to the aquatic environment – Chronic Hazard, H411

Category 2

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

Adverse physicochemical, human health and environmental effects

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

Safety Data Sheet

Hazard statements (CLP)

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Contains : 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone; COUMARIN;

Linalool; Patchouli oil; Allyl ionone; Cinnamic alcohol; Eucalyptol; Cashmeran; Eugenol;

Geraniol; Nerol; L-Carvone; Cinnamic aldehyde: H317 - May cause an allergic skin reaction.

H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

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.

P302+P352 - IF ON SKIN: Wash with plenty of water.

P321 - Specific treatment (see supplemental first aid instruction on this label).

Extra phrases : For professional users only.

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 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

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
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	3.5 – 7	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 1, H410
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran; galaxolide; (HHCB)	CAS-No.: 1222-05-5 EC-No.: 214-946-9 EC Index-No.: 603-212-00-7 REACH-no: 01-2119488227-	1.5 – 3.05	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Vanillin	CAS-No.: 121-33-5 EC-No.: 204-465-2 REACH-no: 01-2119516040-	1.20001 – 2.30002	Eye Irrit. 2, H319
COUMARIN	CAS-No.: 91-64-5 EC-No.: 202-086-7 REACH-no: 01-2119943756- 26	1.1 – 2.25	Acute Tox. 4 (Oral), H302 Skin Sens. 1B, H317
Linalool	CAS-No.: 78-70-6 EC-No.: 201-134-4 EC Index-No.: 603-235-00-2 REACH-no: 01-2119474016-	1 – 2	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317
Patchouli oil	CAS-No.: 8014-09-3 EC-No.: 616-944-7 EC Index-No.: 616-944-7	0.7 – 1.35	Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Chronic 2, H411

Safety Data Sheet

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Allyl ionone	CAS-No.: 79-78-7 EC-No.: 201-225-9	0.6 – 1.25	Aquatic Chronic 2, H411 Skin Sens. 1B, H317
Cinnamic alcohol	CAS-No.: 104-54-1 EC-No.: 203-212-3 REACH-no: 01-2119934496- 29	0.5 – 1	Acute Tox. 4 (Oral), H302 Skin Sens. 1B, H317
Eucalyptol	CAS-No.: 470-82-6 EC-No.: 207-431-5 REACH-no: 01-2119967772- 24	0.5 – 1	Flam. Liq. 3, H226 Skin Sens. 1, H317
Cashmeran	CAS-No.: 33704-61-9 EC-No.: 251-649-3 REACH-no: 01-2119977131- 40	0.5 – 0.9	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 STOT RE 2, H373 Aquatic Chronic 2, H411
Benzyl acetate substance with national workplace exposure limit(s) (BE, DK, ES, IE, LT, LV, PT, RO)	CAS-No.: 140-11-4 EC-No.: 205-399-7 REACH-no: 01-2119638272- 42	0.2 – 0.35	Aquatic Chronic 3, H412
Eugenol	CAS-No.: 97-53-0 EC-No.: 202-589-1 REACH-no: 01-2119971802- 33	0.1 – 0.25	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Sens. 1B, H317
Geraniol	CAS-No.: 106-24-1 EC-No.: 203-377-1 EC Index-No.: 603-241-00-5 REACH-no: 01-2119552430-	0.05 – 0.175	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317
Nerol	CAS-No.: 106-25-2 EC-No.: 203-378-7	0.03 – 0.125	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
L-Carvone	CAS-No.: 6485-40-1 EC-No.: 229-352-5 EC Index-No.: 606-148-00-8	0.1 – 0.1	Skin Sens. 1B, H317
Cinnamic aldehyde	CAS-No.: 104-55-2 EC-No.: 203-213-9 EC Index-No.: 606-155-00-6 REACH-no: 01-2119935242- 45	0.1 – 0.1	Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1A, H317 Aquatic Chronic 3, H412
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	0.001 – 0.0075	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
Dipropylene glycol monomethyl ether substance with national workplace exposure limit(s) (AT, BE, BG, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GI, GR, HR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, NO, CH, TR); substance with a Community workplace exposure limit	CAS-No.: 34590-94-8 EC-No.: 252-104-2	0.000254 – 0.000508	Not classified

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Toluene substance with national workplace exposure limit(s) (AT, BE, BG, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GI, GR, HR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, NO, CH, TR); substance with a Community workplace exposure limit	CAS-No.: 108-88-3 EC-No.: 203-625-9 EC Index-No.: 601-021-00-3	≤ 0.000006	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304

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).

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. Wash with plenty of water/.... If skin irritation or rash occurs:

Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label). Wash contaminated clothing before reuse. 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 : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. 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 inhalation : May cause an allergic skin reaction. 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.

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.

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.

3/26/2025 (Revision date) EN (English) 4/30

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. 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.

6.1.2. 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.

: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

Other information

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 : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product. Contaminated work clothing should not be allowed out of the workplace. Wash

contaminated clothing before reuse.

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

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

8.1.1 National occupational exposure and biological limit values

3/26/2025 (Revision date) EN (English) 5/30

Safety Data Sheet

Benzyl acetate (140-11-4)		
Belgium - Occupational Exposure Limits		
OEL TWA	62 mg/m³	
	10 ppm	
Denmark - Occupational Exposure Limits		
OEL TWA	61 mg/m³	
	10 ppm	
OEL STEL	122 mg/m³	
	20 ppm	
Ireland - Occupational Exposure Limits		
OEL TWA	10 ppm	
OEL STEL	30 ppm (calculated)	
Latvia - Occupational Exposure Limits		
OEL TWA	5 mg/m³	
Lithuania - Occupational Exposure Limits		
IPRV (OEL TWA)	5 mg/m³	
Portugal - Occupational Exposure Limits		
OEL TWA	10 ppm	
OEL chemical category	A4 - Not Classifiable as a Human Carcinogen	
Romania - Occupational Exposure Limits		
OEL TWA	50 mg/m³	
	8 ppm	
OEL STEL	80 mg/m³	
	13 ppm	
Spain - Occupational Exposure Limits		
VLA-ED (OEL TWA)	62 mg/m³	
	10 ppm	
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA	10 ppm	
ACGIH chemical category	Not Classifiable as a Human Carcinogen	
citral (5392-40-5)		
Belgium - Occupational Exposure Limits		
OEL TWA	32 mg/m³ (vapor and aerosol)	
	5 ppm (vapor and aerosol)	
OEL chemical category	Skin	
Ireland - Occupational Exposure Limits		
OEL TWA	5 ppm	
OEL STEL	15 ppm (calculated)	
Poland - Occupational Exposure Limits		
NDS (OEL TWA)	27 mg/m³	
	I .	

Safety Data Sheet

citral (5392-40-5)	
NDSCh (OEL STEL)	54 mg/m³
Portugal - Occupational Exposure Limits	
OEL TWA	5 ppm (inhalable fraction; vapor)
OEL chemical category	Sensitizer dermal, A4 - Not Classifiable as a Human Carcinogen, skin - potential for cutaneous exposure
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	5 ppm (inhalable fraction and vapor)
OEL chemical category	Sensitizer, skin - potential for cutaneous absorption
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	5 ppm (inhalable fraction and vapor)
ACGIH chemical category	Not Classifiable as a Human Carcinogen, Skin - potential significant contribution to overall exposure by the cutaneous route, dermal sensitizer
Toluene (108-88-3)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	192 mg/m³
	50 ppm
IOEL STEL	384 mg/m³
	100 ppm
Remark	Possibility of significant uptake through the skin
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	190 mg/m³
	50 ppm
MAK (OEL STEL)	380 mg/m³
	100 ppm
OEL chemical category	Skin notation
Belgium - Occupational Exposure Limits	
OEL TWA	77 mg/m³
	20 ppm
OEL STEL	384 mg/m³
	100 ppm
OEL chemical category	Skin, Skin notation
Bulgaria - Occupational Exposure Limits	
OEL TWA	192 mg/m³
	50 ppm
OEL STEL	384 mg/m³
	100 ppm
Bulgaria - Biological limit values	·
BLV	1.6 mmol/mmol Creatinine Parameter: Hippuric acid - Medium: urine - Sampling time: at the end of exposure or end of work shift

Safety Data Sheet

Toluene (108-88-3)	
Croatia - Occupational Exposure Limits	
GVI (OEL TWA)	192 mg/m³
	50 ppm
KGVI (OEL STEL)	384 mg/m³
	100 ppm
OEL chemical category	Skin notation
Croatia - Biological limit values	
BLV	1 mg/l Parameter: Toluene - Medium: blood - Sampling time: at the end of the work shift 20 ppm Parameter: Toluene - Medium: final exhaled air - Sampling time: during exposure 2.5 g/g creatinine Parameter: Hippuric acid - Medium: urine - Sampling time: at the end of the work shift (calculated on the average Creatinine value of 1.2 g/L urine) 1 mg/g creatinine Parameter: o-Cresol - Medium: urine - Sampling time: at the end of the work shift (calculated on the average Creatinine value of 1.2 g/L urine)
Cyprus - Occupational Exposure Limits	
OEL TWA	192 mg/m³
	50 ppm
OEL STEL	384 mg/m³
	100 ppm
OEL chemical category	Skin-potential for cutaneous absorption
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	200 mg/m³
OEL chemical category	Potential for cutaneous absorption
Czech Republic - Biological limit values	
BLV	1.6 µmol/mmol Creatinine Parameter: o-Cresol - Medium: urine - Sampling time: end of shift (after hydrolysis) 1000 µmol/mmol Creatinine Parameter: Hippuric acid - Medium: urine - Sampling time: end of shift (exposure testing using the o-Cresol parameter to precisely measure Toluene exposure is needed if the value of Hippuric acid is between 1600 and 2500 mg/g of Creatinine, no additional testing is needed if the Hippuric acid value is >2500 mg/g of Creatinine as work exposure to Toluene will have highly exceeded the PEL value.) 1.5 mg/g creatinine Parameter: o-Cresol - Medium: urine - Sampling time: end of shift (after hydrolysis) 1600 mg/g creatinine Parameter: Hippuric acid - Medium: urine - Sampling time: end of shift (exposure testing using the o-Cresol parameter to precisely measure Toluene exposure is needed if the value of Hippuric acid is between 1600 and 2500 mg/g of Creatinine, no additional testing is needed if the Hippuric acid value is >2500 mg/g of Creatinine as work exposure to Toluene will have highly exceeded the PEL value.)
Denmark - Occupational Exposure Limits	
OEL TWA	94 mg/m³
	25 ppm
OEL STEL	384 mg/m³
	100 ppm
OEL chemical category	Potential for cutaneous absorption
Estonia - Occupational Exposure Limits	
OEL TWA	192 mg/m³

Safety Data Sheet

Toluene (108-88-3)		
	50 ppm	
OEL STEL	384 mg/m³	
	100 ppm	
OEL chemical category	Skin notation	
Finland - Occupational Exposure Limits		
HTP (OEL TWA)	81 mg/m³	
	25 ppm	
HTP (OEL STEL)	380 mg/m³	
	100 ppm	
OEL chemical category	Potential for cutaneous absorption	
Finland - Biological limit values		
BLV	500 nmol/L Parameter: Toluene - Medium: blood - Sampling time: in the morning after a working day	
France - Occupational Exposure Limits		
VME (OEL TWA)	76.8 mg/m³ (restrictive limit)	
	20 ppm (restrictive limit)	
VLE (OEL C/STEL)	384 mg/m³ (restrictive limit)	
	100 ppm (restrictive limit)	
OEL chemical category	Reproductive Toxin category 2, Risk of cutaneous absorption	
France - Biological limit values		
BLV	20 µg/l Parameter: Toluene - Medium: blood - Sampling time: end of workweek (Semi-quantitative (ambiguous interpretation)) Parameter: Hippuric acid - Medium: urine - Sampling time: end of shift (per the Authority, the values for this substance must be decided and/or determined on a case by case basis. Guidance for the calculation of and interpretation of values is provided in the source)	
Germany - Occupational Exposure Limits (TRGS 90	00)	
AGW (OEL TWA)	190 mg/m³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)	
	50 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)	
Chemical category	Skin notation	
Germany - Biological limit values (TRGS 903)		
Biological limit value	600 μg/l Parameter: Toluene - Medium: whole blood - Sampling time: immediately after exposure 75 μg/l Parameter: Toluene - Medium: urine - Sampling time: end of exposure or shift 1.5 mg/l Parameter: o-Cresol (after hydrolysis) - Medium: urine - Sampling time: at the end of the shift, in case of long-term exposure after several previous shifts	
Gibraltar - Occupational Exposure Limits		
OEL TWA	192 mg/m³	
	50 ppm	
OEL STEL	384 mg/m³	
	100 ppm	
OEL chemical category	Skin notation	

Safety Data Sheet

Toluene (108-88-3)	
Greece - Occupational Exposure Limits	
OEL TWA	192 mg/m³
	50 ppm
OEL STEL	384 mg/m³
	100 ppm
OEL chemical category	skin - potential for cutaneous absorption
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	190 mg/m³
CK (OEL STEL)	384 mg/m³
OEL chemical category	Potential for cutaneous absorption
Ireland - Occupational Exposure Limits	
OEL TWA	192 mg/m³
	50 ppm
OEL STEL	384 mg/m³
	100 ppm
OEL chemical category	Potential for cutaneous absorption
Italy - Occupational Exposure Limits	
OEL TWA	192 mg/m³
	50 ppm
OEL chemical category	skin - potential for cutaneous absorption
Latvia - Occupational Exposure Limits	
OEL TWA	50 mg/m³
	14 ppm
OEL chemical category	skin - potential for cutaneous exposure
Latvia - Biological Exposure Indices	
BEI	600 μg/l Parameter: Toluene - Medium: blood - Sampling time: at the end of exposure (for assessment of long-term exposure, samples are taken at the end of a shift after several previous shifts) 75 μg/l Parameter: Toluene - Medium: urine - Sampling time: end of shift (for assessment of long-term exposure, samples are taken at the end of a shift after several previous shifts) 1.5 mg/l Parameter: o-Cresol - Medium: urine - Sampling time: at the end of exposure or shift (after hydrolysis)
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	192 mg/m³
	50 ppm
TPRV (OEL STEL)	384 mg/m³
	100 ppm
OEL chemical category	Reproductive toxin, Skin notation
Luxembourg - Occupational Exposure Limits	
OEL TWA	192 mg/m³
	50 ppm

Safety Data Sheet

Toluene (108-88-3)	
OEL STEL	384 mg/m³
	100 ppm
OEL chemical category	Possibility of significant uptake through the skin
Malta - Occupational Exposure Limits	
OEL TWA	192 mg/m³
	50 ppm
OEL STEL	384 mg/m³
	100 ppm
OEL chemical category	Possibility of significant uptake through the skin
Netherlands - Occupational Exposure Lim	its
TGG-8u (OEL TWA)	150 mg/m³
	39 ppm
TGG-15min (OEL STEL)	384 mg/m³
	100 ppm
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	100 mg/m³
NDSCh (OEL STEL)	200 mg/m³
Portugal - Occupational Exposure Limits	
OEL TWA	192 mg/m³ (indicative limit value)
	50 ppm (indicative limit value)
OEL STEL	384 mg/m³ (indicative limit value)
	100 ppm (indicative limit value)
OEL chemical category	A4 - Not Classifiable as a Human Carcinogen, skin - potential for cutaneous exposure indicative limit value
Romania - Occupational Exposure Limits	
OEL TWA	192 mg/m³
	50 ppm
OEL STEL	384 mg/m³
	100 ppm
OEL chemical category	Skin notation
Romania - Biological limit values	
BLV	2 g/l Parameter: Hippuric acid - Medium: urine - Sampling time: end of shift 3 mg/l Parameter: o-Cresol - Medium: urine - Sampling time: end of shift
Slovakia - Occupational Exposure Limits	
NPHV (OEL TWA)	192 mg/m³
	50 ppm
NPHV (OEL C)	384 mg/m³ (also biological monitoring considered)
OEL chemical category	Potential for cutaneous absorption

Safety Data Sheet

Toluene (108-88-3)	
Slovakia - Biological limit values	
BLV	600 µg/l Parameter: Toluene - Medium: blood - Sampling time: end of exposure or work shift 1.5 mg/l Parameter: o-Cresol - Medium: urine - Sampling time: after all work shifts (for long-term exposure) 1.5 mg/l Parameter: o-Cresol - Medium: urine - Sampling time: end of exposure or work shift 2401 mg/g creatinine Parameter: Hippuric acid - Sampling time: end of exposure or work shift
Slovenia - Occupational Exposure Limits	
OEL TWA	192 mg/m³
	50 ppm
OEL STEL	384 mg/m³
	100 ppm
OEL chemical category	Category 2, Potential for cutaneous absorption
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	192 mg/m³ (indicative limit value)
	50 ppm (indicative limit value)
VLA-EC (OEL STEL)	384 mg/m³
	100 ppm
OEL chemical category	skin - potential for cutaneous absorption
Spain - Biological limit values	
BLV	0.6 mg/l Parameter: o-Cresol - Medium: urine - Sampling time: end of shift 0.05 mg/l Parameter: Toluene - Medium: blood - Sampling time: start of last shift of workweek 0.08 mg/l Parameter: Toluene - Medium: urine - Sampling time: end of shift
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	192 mg/m³
	50 ppm
KGV (OEL STEL)	384 mg/m³
	100 ppm
OEL chemical category	Skin notation
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	191 mg/m³
	50 ppm
WEL STEL (OEL STEL)	384 mg/m³
	100 ppm
WEL chemical category	Potential for cutaneous absorption
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA)	94 mg/m³
	25 ppm
Korttidsverdi (OEL STEL)	141 mg/m³ (value calculated)

Safety Data Sheet

Toluene (108-88-3)		
	37.5 ppm (value calculated)	
OEL chemical category	Skin notation	
Switzerland - Occupational Exposure Limits		
MAK (OEL TWA)	190 mg/m³	
	50 ppm	
KZGW (OEL STEL)	760 mg/m³	
	200 ppm	
OEL chemical category	Skin notation, Category 2 reproductive toxin	
Switzerland - BAT		
BAT	600 μg/l Parameter: Toluene - Medium: whole blood - Sampling time: end of shift 6.48 μmol/l Parameter: Toluene - Medium: whole blood - Sampling time: end of shift 2 g/g creatinine Parameter: Hippuric acid - Medium: urine - Sampling time: end of shift, and after several shifts (for long-term exposures) Parameter: Hippuric acid - Medium: urine - Sampling time: end of shift, and after several shifts (for long-term exposures) 0.5 mg/l Parameter: o-Cresol - Medium: urine - Sampling time: end of shift, and after several shifts (for long-term exposures) 4.62 μmol/l Parameter: o-Cresol - Medium: urine - Sampling time: end of shift, and after several shifts (for long-term exposures) 75 μg/l Parameter: Toluol - Medium: urine - Sampling time: end of shift	
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA	20 ppm	
ACGIH chemical category	Not Classifiable as a Human Carcinogen	
USA - ACGIH - Biological Exposure Indices		
BEI	0.02 mg/l Parameter: Toluene - Medium: blood - Sampling time: prior to last shift of workweek 0.03 mg/l Parameter: Toluene - Medium: urine - Sampling time: end of shift 0.3 mg/g creatinine Parameter: o-Cresol with hydrolysis - Medium: urine - Sampling time: end of shift (background)	
Dipropylene glycol monomethyl ether (34590-	94-8)	
EU - Indicative Occupational Exposure Limit (IOEL)		
IOEL TWA	308 mg/m³	
	50 ppm	
Remark	Possibility of significant uptake through the skin	
Austria - Occupational Exposure Limits		
MAK (OEL TWA)	307 mg/m³ (mixed isomers)	
	50 ppm (mixed isomers)	
MAK (OEL STEL)	614 mg/m³ (isomers mixtures)	
	100 ppm (isomers mixtures)	
OEL chemical category	Skin notation	
Belgium - Occupational Exposure Limits		
OEL TWA	308 mg/m³	
	50 ppm	
OEL chemical category	Skin, Skin notation	

Safety Data Sheet

Dipropylene glycol monomethyl ether (34590-94-8)		
Bulgaria - Occupational Exposure Limits		
OEL TWA	308 mg/m³	
	50 ppm	
Croatia - Occupational Exposure Limits		
GVI (OEL TWA)	308 mg/m³	
	50 ppm	
OEL chemical category	Skin notation	
Cyprus - Occupational Exposure Limits		
OEL TWA	308 mg/m³	
	50 ppm	
OEL chemical category	Skin-potential for cutaneous absorption	
Czech Republic - Occupational Exposure Limits		
PEL (OEL TWA)	270 mg/m³	
OEL chemical category	Potential for cutaneous absorption	
Denmark - Occupational Exposure Limits		
OEL TWA	309 mg/m³	
	50 ppm	
OEL STEL	618 mg/m³	
	100 ppm	
OEL chemical category	Potential for cutaneous absorption	
Estonia - Occupational Exposure Limits		
OEL TWA	308 mg/m³	
	50 ppm	
OEL chemical category	Skin notation	
Finland - Occupational Exposure Limits		
HTP (OEL TWA)	310 mg/m³	
	50 ppm	
OEL chemical category	Potential for cutaneous absorption	
France - Occupational Exposure Limits		
VME (OEL TWA)	308 mg/m³ (restrictive limit)	
	50 ppm (restrictive limit)	
OEL chemical category	Risk of cutaneous absorption	
Germany - Occupational Exposure Limits (TRGS 900)		
AGW (OEL TWA)	310 mg/m³ (isomer mixture)	
	50 ppm (isomer mixture)	
Gibraltar - Occupational Exposure Limits		
OEL TWA	308 mg/m³	
	50 ppm	
OEL chemical category	Skin notation	

Safety Data Sheet

Dipropylene glycol monomethyl ether (345	90-94-8)		
Greece - Occupational Exposure Limits			
OEL TWA	600 mg/m³		
	100 ppm		
OEL STEL	900 mg/m³		
	150 ppm		
OEL chemical category	skin - potential for cutaneous absorption		
Hungary - Occupational Exposure Limits			
AK (OEL TWA)	308 mg/m³		
Ireland - Occupational Exposure Limits			
OEL TWA	308 mg/m³ ((2-Methoxymethylethoxy)propanol)		
	50 ppm ((2-Methoxymethylethoxy)propanol)		
OEL STEL	924 mg/m³ (calculated (2-(2-Methoxypropoxy)-1-propanol)		
	150 ppm (calculated (2-(2-Methoxypropoxy)-1-propanol)		
OEL chemical category	Potential for cutaneous absorption		
Italy - Occupational Exposure Limits			
OEL TWA	308 mg/m³		
	50 ppm		
OEL chemical category	skin - potential for cutaneous absorption		
Latvia - Occupational Exposure Limits			
OEL TWA	308 mg/m³		
	50 ppm		
OEL chemical category	skin - potential for cutaneous exposure		
Lithuania - Occupational Exposure Limits			
IPRV (OEL TWA)	300 mg/m³ (2-(2-Methoxypropoxy)-propanol)		
	50 ppm (2-(2-Methoxypropoxy)-propanol)		
TPRV (OEL STEL)	450 mg/m³ (2-(2-Methoxypropoxy)-propanol)		
	75 ppm (2-(2-Methoxypropoxy)-propanol)		
OEL chemical category	Skin notation		
Luxembourg - Occupational Exposure Limits			
OEL TWA	308 mg/m³		
	50 ppm		
OEL chemical category	Possibility of significant uptake through the skin		
Malta - Occupational Exposure Limits			
OEL TWA	308 mg/m³		
	50 ppm		
OEL chemical category	Possibility of significant uptake through the skin		
Netherlands - Occupational Exposure Limits			
TGG-8u (OEL TWA)	300 mg/m³		

Safety Data Sheet

Dipropylene glycol monomethyl ether (34590	-94-8)		
Poland - Occupational Exposure Limits			
NDS (OEL TWA)	240 mg/m³ (mixture of isomers: 1-(2-Methoxy-1-methylethoxy)propan-2-ol, 1-(2-Methoxy-2-methylethoxy)propan-2-ol and 2-(2-Methoxy-1-methylethoxy)propan-1-ol)		
NDSCh (OEL STEL)	480 mg/m³ (mixture of isomers: 1-(2-Methoxy-1-methylethoxy)propan-2-ol, 1-(2-Methoxy-2-methylethoxy)propan-2-ol, 2-(2-Methoxy-1-methylethoxy)propan-1-ol)		
Portugal - Occupational Exposure Limits			
OEL TWA	308 mg/m³ (indicative limit value)		
	50 ppm (indicative limit value)		
OEL STEL	150 ppm		
OEL chemical category	skin - potential for cutaneous exposure indicative limit value		
Romania - Occupational Exposure Limits			
OEL TWA	308 mg/m³		
	50 ppm		
OEL chemical category	Skin notation		
Slovakia - Occupational Exposure Limits			
NPHV (OEL TWA)	308 mg/m³		
	50 ppm		
OEL chemical category	Potential for cutaneous absorption		
Slovenia - Occupational Exposure Limits			
OEL TWA	308 mg/m³		
	50 ppm		
OEL STEL	308 mg/m³		
	50 ppm		
OEL chemical category	Potential for cutaneous absorption		
Spain - Occupational Exposure Limits			
VLA-ED (OEL TWA)	308 mg/m³ (indicative limit value)		
	50 ppm (indicative limit value)		
OEL chemical category	skin - potential for cutaneous absorption		
Sweden - Occupational Exposure Limits			
NGV (OEL TWA)	300 mg/m³		
	50 ppm		
KGV (OEL STEL)	450 mg/m³		
	75 ppm		
OEL chemical category	Skin notation		
United Kingdom - Occupational Exposure Limits			
WEL TWA (OEL TWA)	308 mg/m³		
	50 ppm		
WEL STEL (OEL STEL)	924 mg/m³ (calculated)		
150 ppm (calculated)			
WEL chemical category	Potential for cutaneous absorption		

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Dipropylene glycol monomethyl ether (34590-94-8)		
Norway - Occupational Exposure Limits		
Grenseverdi (OEL TWA)	300 mg/m³	
	50 ppm	
Korttidsverdi (OEL STEL)	375 mg/m³ (value calculated)	
	75 ppm (value calculated)	
OEL chemical category	Skin notation	
Switzerland - Occupational Exposure Limits		
MAK (OEL TWA)	300 mg/m³ (aerosol, vapour)	
	50 ppm (aerosol, vapour)	
KZGW (OEL STEL)	300 mg/m³ (aerosol, vapour)	
	50 ppm (aerosol, vapour)	
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA 50 ppm (Dipropylene glycol methyl ether)		

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection:

Chemical goggles or safety glasses. Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves. Wear protective gloves.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Wear appropriate mask

8.2.2.4. Thermal hazards

No additional information available

8.2.3. 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 : light yellow. amber. Conforms to standard.

Odour : characteristic. 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 : Not available рΗ Viscosity, kinematic : Not available Solubility Not available Not available

Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : 0.000454877 mm Hg (calculated value)

Vapour pressure at 50° C : Not available Density : Not available Relative density : ≈ 0.96 Relative vapour density at 20° C : Not available Particle characteristics : Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

VOC content : 1.614074 % (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

Stable under normal conditions. Not established.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. 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) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Not classified			
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran; galaxolide; (HHCB) (1222-05-5)			
> 3250 mg/kg (Source: CHEMVIEW)			
> 3250 mg/kg (Source: CHEMVIEW)			
> 5.04 mg/l/4h			
> 5010 mg/kg (Source: OECD_SIDS)			
2600 mg/kg bodyweight			
> 5000 mg/kg (Source: JAPAN_GHS)			
293 mg/kg (Source: ECHA_API)			
Linalool (78-70-6)			
2790 mg/kg			
Patchouli oil (8014-09-3)			
> 5 g/kg (Source: NLM_CIP)			
Cinnamic alcohol (104-54-1)			
2000 mg/kg bodyweight			
> 5000 mg/kg (Source: ECHA_API)			
2480 mg/kg (Source: NLM_CIP)			
2480 mg/kg bodyweight			
Cashmeran (33704-61-9)			
2685 mg/kg (Source: ECHA_API)			
2900 mg/kg bodyweight			
, , , , , , , , , , , , , , , , , , ,			
2490 mg/kg (Source: JAPAN_GHS)			

3/26/2025 (Revision date) EN (English) 19/30

Safety Data Sheet

Eugenol (97-53-0)			
LD50 oral rat	1930 mg/kg (Source: NZ_CCID)		
LD50 oral	2500 mg/kg bodyweight		
LC50 Inhalation - Rat	> 2.58 mg/l/4h		
Geraniol (106-24-1)			
LD50 oral rat	3600 mg/kg (Source: NLM_CIP)		
LD50 oral	3600 mg/kg bodyweight		
LD50 dermal rabbit	> 5 g/kg (Source: NLM_CIP)		
Nerol (106-25-2)			
LD50 oral rat	4500 mg/kg (Source: NLM_CIP)		
LD50 oral	4500 mg/kg bodyweight		
LD50 dermal rabbit	> 5 g/kg (Source: NLM_CIP)		
citral (5392-40-5)			
LD50 oral rat	4960 mg/kg (Source: NLM_CIP)		
LD50 dermal rabbit	2250 mg/kg (Source: NLM_CIP)		
Toluene (108-88-3)			
LD50 oral rat	2600 mg/kg (Source: JAPAN_GHS)		
LD50 dermal rabbit	12000 mg/kg (Source: JAPAN_GHS)		
LC50 Inhalation - Rat	12.5 mg/l/4h		
Dipropylene glycol monomethyl ether (34590-94-8)			
LD50 oral rat	5.35 g/kg (Source: NLM_HSDB)		
LD50 dermal rabbit	9500 mg/kg (Source: NLM_CIP)		
L-Carvone (6485-40-1)			
LD50 oral rat	5400 mg/kg (Source: KR_NIER)		
LD50 oral	2500 mg/kg bodyweight		
LD50 dermal rat	> 2000 mg/kg (Source: ECHA_API)		
LD50 dermal	3800 mg/kg bodyweight		
Cinnamic aldehyde (104-55-2)			
LD50 oral rat	2220 mg/kg (Source: NLM_CIP)		
LD50 oral	2220 mg/kg		
LD50 dermal rabbit	1260 mg/kg (Source: EPA_HPV)		
Skin corrosion/irritation :	Not classified Record on available date, the classification criteria are not met		
Additional information : Serious eye damage/irritation :	Based on available data, the classification criteria are not met Not classified		
Additional information :	Based on available data, the classification criteria are not met		
Respiratory or skin sensitisation :	May cause an allergic skin reaction.		
Germ cell mutagenicity :	Not classified		
Additional information :	Based on available data, the classification criteria are not met		
Carcinogenicity : Additional information :	Not classified Based on available data, the classification criteria are not met		
, additional information .	Sassa on available data, the elaconication entend are not incl		

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

COUMARIN (91-64-5)	
IARC group	3 - Not classifiable
Benzyl acetate (140-11-4)	
IARC group	3 - Not classifiable
Eugenol (97-53-0)	
IARC group	3 - Not classifiable
Toluene (108-88-3)	
IARC group	3 - Not classifiable
Additional information : STOT-single exposure :	Not classified Based on available data, the classification criteria are not met Not classified Based on available data, the classification criteria are not met
Toluene (108-88-3)	
STOT-single exposure	May cause drowsiness or dizziness.
- '	Not classified Based on available data, the classification criteria are not met
Cashmeran (33704-61-9)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Toluene (108-88-3)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
	Not classified Based on available data, the classification criteria are not met
Toluene (108-88-3)	
Hydrocarbon	Yes

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. 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 : Toxic to aquatic life with long lasting effects.

Ecology - water : Toxic to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term : Not classified

(acute)

Hazardous to the aquatic environment, long–term : Toxic to aquatic life with long lasting effects.

(chronic)

(GIII OTIIC)			
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran; galaxolide; (HHCB) (1222-05-5)			
LC50 - Fish [1] 0.452 mg/l Wolf, 1996d-27682			
LC50 - Other aquatic organisms [1] > 0.14 mg/l REACH DOSSIER Pimephales promelas			
EC50 - Crustacea [2]	260 μg/l REACH Dossier		

3/26/2025 (Revision date) EN (English) 21/30

Safety Data Sheet

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran; galaxolide; (HHCB) (1222-05-5)				
EC50 - Other aquatic organisms [1]	0.131 mg/l REACH Dossier			
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])			
Linalool (78-70-6)				
EC50 96h - Algae [1]	88.3 mg/l (Species: Desmodesmus subspicatus)			
Eucalyptol (470-82-6)				
LC50 - Fish [1]	95.4 (95.4 – 109) mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])			
Cashmeran (33704-61-9)				
LC50 - Fish [1]	10.3 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static] Source: ECHA)			
Eugenol (97-53-0)				
LC50 - Fish [1]	13 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static] Source: ECHA)			
Geraniol (106-24-1)				
LC50 - Fish [1]	22 mg/l (Exposure time: 96 h - Species: Danio rerio [static] Source: ECHA)			
Nerol (106-25-2)	Nerol (106-25-2)			
LC50 - Fish [1]	20.3 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static] Source: ECHA)			
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)			
Toluene (108-88-3)				
LC50 - Fish [1]	15.22 – 19.05 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)			
LC50 - Fish [2]	12.6 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)			
EC50 - Crustacea [1]	5.46 – 9.83 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])			
EC50 - Crustacea [2]	11.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)			
EC50 72h - Algae [1]	12.5 mg/l (Species: Pseudokirchneriella subcapitata [static])			
EC50 96h - Algae [1]	> 433 mg/l (Species: Pseudokirchneriella subcapitata)			
Dipropylene glycol monomethyl ether (34590-94-8)				
LC50 - Fish [1]	> 10000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])			
EC50 - Crustacea [1]	1919 mg/l (Exposure time: 48 h - Species: Daphnia magna)			
L-Carvone (6485-40-1)				
LC50 - Fish [1]	6.1 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [semi-static] Source: ECHA)			

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

12.2. Persistence and degradability	12.2. Persistence and degradability			
AMBER NOIR #EU37338F				
Persistence and degradability	May cause long-term adverse effects in the environment. Not established.			
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone (54464-57-2)				
rsistence and degradability Rapidly degradable				
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylin	ndeno[5,6-c]pyran; galaxolide; (HHCB) (1222-05-5)			
Persistence and degradability	egradability Rapidly degradable			
Vanillin (121-33-5)				
Persistence and degradability	Rapidly degradable			
COUMARIN (91-64-5)				
Persistence and degradability	Rapidly degradable			
Linalool (78-70-6)				
Persistence and degradability	Rapidly degradable			
Patchouli oil (8014-09-3)				
Persistence and degradability	Rapidly degradable			
Allyl ionone (79-78-7)				
Persistence and degradability	Rapidly degradable			
Cinnamic alcohol (104-54-1)				
Persistence and degradability	Rapidly degradable			
Eucalyptol (470-82-6)				
Persistence and degradability	Rapidly degradable			
Cashmeran (33704-61-9)				
Persistence and degradability	Rapidly degradable			
Benzyl acetate (140-11-4)				
Persistence and degradability	Rapidly degradable			
Eugenol (97-53-0)				
Persistence and degradability	Rapidly degradable			
Geraniol (106-24-1)				
Persistence and degradability	Rapidly degradable			
Nerol (106-25-2)				
Persistence and degradability	Rapidly degradable			
citral (5392-40-5)				
Persistence and degradability	Rapidly degradable			
Toluene (108-88-3)				
Persistence and degradability	Rapidly degradable			
Dipropylene glycol monomethyl ether (34590-94-8)				
Persistence and degradability	Rapidly degradable			

3/26/2025 (Revision date) EN (English) 23/30

Safety Data Sheet

L-Carvone (6485-40-1)			
Persistence and degradability	Rapidly degradable		
Cinnamic aldehyde (104-55-2)			
Persistence and degradability	Rapidly degradable		
12.3. Bioaccumulative potential			
AMBER NOIR #EU37338F			
Bioaccumulative potential	Not established.		
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylin	ndeno[5,6-c]pyran; galaxolide; (HHCB) (1222-05-5)		
BCF - Fish [1]	(1618 dimensionless (whole body w.w.)		
Partition coefficient n-octanol/water (Log Pow)	5.3 (at 25 °C (at pH 7)		
Vanillin (121-33-5)			
Partition coefficient n-octanol/water (Log Pow)	1.23 (at 22 °C)		
Cinnamic alcohol (104-54-1)			
Partition coefficient n-octanol/water (Log Pow)	1.636 (at 27 °C (at pH 3.52)		
Eucalyptol (470-82-6)			
Partition coefficient n-octanol/water (Log Pow)	3.4		
Cashmeran (33704-61-9)			
BCF - Fish [1]	(81 dimensionless (whole body w.w.)		
Partition coefficient n-octanol/water (Log Pow)	4.2 (at 20 °C)		
Benzyl acetate (140-11-4)			
Partition coefficient n-octanol/water (Log Pow)	1.96 (at 25 °C (at pH 7)		
Eugenol (97-53-0)			
Partition coefficient n-octanol/water (Log Pow)	1.83 (at 30 °C (at pH 5.5)		
Geraniol (106-24-1)			
Partition coefficient n-octanol/water (Log Pow)	2.6 (at 25 °C)		
Nerol (106-25-2)			
Partition coefficient n-octanol/water (Log Pow)	2.76 (at 30 °C (at pH 6.5)		
citral (5392-40-5)			
Partition coefficient n-octanol/water (Log Pow)	2.76 (at 25 °C)		
Toluene (108-88-3)			
Partition coefficient n-octanol/water (Log Pow)	2.73 (at 20 °C (at pH 7)		
Dipropylene glycol monomethyl ether (34590-94-8)			
Partition coefficient n-octanol/water (Log Pow)	0.35 (at 25 °C (at pH 7)		
L-Carvone (6485-40-1)			
Partition coefficient n-octanol/water (Log Pow)	2.74 (at 37 °C (at pH 7.2)		

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Cinnamic aldehyde (104-55-2)	
Partition coefficient n-octanol/water (Log Pow)	2.1065 (at 25 °C)

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

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods Product/Packaging disposal recommendations

Ecological information HP Code

- : Dispose of contents/container in accordance with licensed collector's sorting instructions.
- : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container in accordance with local/national laws and regulations.
- : Avoid release to the environment.
- : HP4 "Irritant skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.

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 n	14.1. UN number or ID number				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082	
14.2. UN proper shippin	g 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 descr	iption				
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,	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	

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

ADR	IMDG	IATA	ADN	RID		
14.3. Transport hazard class(es)						
9	9	9	9	9		
**************************************	2	**************************************	**************************************	**************************************		
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	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, 650

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 : TP1, TP29

(ADR)

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 : CV13

and handling (ADR)

Hazard identification number (Kemler No.) : 90

Orange plates :

90 3082

Tunnel restriction code (ADR) : EAC code : •3Z

Transport by sea

Special provisions (IMDG) : 274, 335, 375, 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) : T91, TP29

EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-F
Stowage category (IMDG) : A

Air transport

PCA Excepted quantities (IATA) : E1

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

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, 650

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, 650

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 : TP1, TP29

(RID)

Tank codes for RID tanks (RID) : LGBV

Transport category (RID) : 3

Special provisions for carriage – Packages (RID) : W12

Special provisions for carriage - Loading, unloading : CW13, CW31

and handling (RID)

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(a)	Eucalyptol ; Toluene	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

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

EU restriction list (REACH Annex XVII)				
Reference code	Applicable on	Entry title or description		
3(b)	AMBER NOIR #EU37338F; 1- (1,2,3,4,5,6,7,8- Octahydro-2,3,8,8- tetramethyl-2- naphthalenyl)ethanone; Linalool; Patchouli oil; Allyl ionone; Eucalyptol; Cashmeran; Eugenol; Geraniol; Nerol; citral; Toluene; L-Carvone; Cinnamic aldehyde	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)	AMBER NOIR #EU37338F; 1- (1,2,3,4,5,6,7,8- Octahydro-2,3,8,8- tetramethyl-2- naphthalenyl)ethanone; 1,3,4,6,7,8-hexahydro- 4,6,6,7,8,8- hexamethylindeno[5,6- c]pyran; galaxolide; (HHCB); Patchouli oil; Allyl ionone; Cashmeran; Benzyl acetate; Cinnamic aldehyde	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.	Eucalyptol ; Toluene	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.		
48.	Toluene	Toluene		

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 (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 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 : 1.614074 % (calculated value)(CARB VOC) (%w/w)

Explosives Precursors Regulation (2019/1148)

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

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Drug Precursors Regulation (273/2004)

Contains 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)

Name	CN designation	CAS-No.	CN code	Category, Subcategory	Threshold	Annex
Toluene		108-88-3	2902 30 00	Category 3		Annex I

15.1.2. National regulations

France

Occupational diseases		
Code	Description	
RG 4 BIS	Gastrointestinal disorders caused by benzene, toluene, xylenes and all products containing them	
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide	

Germany

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG).

Observe restrictions according Act on the Protection of Young People in Employment

(JArbSchG).

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1).

List of sensitizing substances (TRGS 907) : Contains sensitizing substances according TRGS 907.

Major Accidents Ordinance (12. BImSchV) : Is not subject to the Major Accidents Ordinance (12. BImSchV)

Netherlands

ABM category : A(2) - toxic for aquatic organisms, may have longterm hazardous effects in aquatic

environment

SZW-lijst van kankerverwekkende stoffen

SZW-lijst van mutagene stoffen

 ${\sf SZW\text{-}lijst\ van\ reprotoxische\ stoffen-Borstvoeding}$

SZW-lijst van reprotoxische stoffen –

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – Ontwikkeling : Toluene is listed

None of the components are listed

None of the components are listed None of the components are listed

: None of the components are listed

Denmark

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct contact with the product

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 (Dermal)	Acute toxicity (dermal), 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	

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Full text of H- and EUH-statements:			
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 Dam. 1	Serious eye damage/eye irritation, Category 1		
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2		
Flam. Liq. 2	Flammable liquids, Category 2		
Flam. Liq. 3	Flammable liquids, Category 3		
H225	Highly flammable liquid and vapour.		
H226	Flammable liquid and vapour.		
H302	Harmful if swallowed.		
H304	May be fatal if swallowed and enters airways.		
H312	Harmful in contact with skin.		
H315	Causes skin irritation.		
H317	May cause an allergic skin reaction.		
H318	Causes serious eye damage.		
H319	Causes serious eye irritation.		
H336	May cause drowsiness or dizziness.		
H361d	Suspected of damaging 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.		
Repr. 2	Reproductive toxicity, Category 2		
Skin Irrit. 2	Skin corrosion/irritation, Category 2		
Skin Sens. 1	Skin sensitisation, Category 1		
Skin Sens. 1A	Skin sensitisation, category 1A		
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, Narcosis		

The classification complies with

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.

: ATP 12