

BEES KNEES FO-0066

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

1.1. Product identifier

Product form	: Mixture
Product name	: BEES KNEES FO-0066
UFI	: WF95-92MR-2005-A5GS
Product code	: FO-0066
Type of product	: Perfumes, Fragrances
Product group	: Finished Good

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
Industrial/Professional use spec	use : For professional use only Industrial
Use of the substance/mixture	: Perfumes, Fragrances
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

Fragrance Orchard

Neutrino,
Albert Road,
Essex CM7 3JQ GB
- United Kingdom

1.4. Emergency telephone number

Emergency number: +44 1376 555185

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
Serious eye damage/eye irritation, Category 2	H319
Skin sensitization, Category 1	H317
Carcinogenicity Category 1B	H350
Hazardous to the aquatic environment - Chronic Hazard Category 2	H411
Full text of H statements : see section 16	

Adverse physicochemical, human health and environmental

effects. May cause cancer. Harmful if swallowed. Causes serious eye irritation. Toxic to aquatic life with long lasting effects. May cause an allergic skin reaction.

2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008

[CLP] Hazard pictograms (CLP)



Signal word (CLP)	: Danger
Hazardous ingredients	: Benzyl benzoate; Damascenone Total; Acetaldehyde; Isoeugenol; 2-Hydroxybenzoic acid, benzyl ester; Majantol; Mayol; Hydroxy; Nutmeg Oil
Hazard statements (CLP)	: H302 - Harmful if swallowed. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H350 - May cause cancer. H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. 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. P302+P352 - IF ON SKIN: Wash with plenty of water. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

No additional information available

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]
Benzyl benzoate	(CAS-No.) 120-51-4 (EC-No.) 204-402-9 (EC Index-No.) 607-085-00-9 (REACH-no) 01-2119976371-33	44.89 – 64.89	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Verdoh	(CAS-No.) 88-41-5 (EC-No.) 201-828-7 (REACH-no) 01-2119970713-33	4 – 8	Aquatic Chronic 2, H411
2-Hydroxybenzoic acid, benzyl ester	(CAS-No.) 118-58-1 (EC-No.) 204-262-9 (REACH-no) 01-2119969442-31	4 – 8	Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 3, H412
Ethyl vanillin crystals	(CAS-No.) 121-32-4 (EC-No.) 204-464-7 (REACH-no) 01-211958961-24	1.5 – 3	Eye Irrit. 2, H319
Aldehyde C-14	(CAS-No.) 104-67-6 (EC-No.) 203-225-4 (REACH-no) 01-2119959333-34	1.5 – 3	Aquatic Chronic 3, H412
Tetrahydrolinalool	(CAS-No.) 78-69-3 (EC-No.) 201-133-9	1.315 – 2.63	Skin Irrit. 2, H315 Eye Irrit. 2, H319
Anisic aldehyde	(CAS-No.) 123-11-5 (EC-No.) 204-602-6 (REACH-no) 01-2119977101-43	0.9 – 1.8	Aquatic Chronic 3, H412
Benzene carboxaldehyde	(CAS-No.) 100-52-7 (EC-No.) 202-860-4 (EC Index-No.) 605-012-00-5 (REACH-no) 01-2119455540-44	0.75 – 1.5	Acute Tox. 4 (Oral), H302

Majantol	(CAS-No.) 103694-68-4 (EC-No.) 403-140-4 (EC Index-No.) 603-138-00-5	0.023 – 0.50508	Skin Sens. 1, H317 Aquatic Chronic 3, H412
Mayol	(CAS-No.) 13828-37-0 (EC-No.)	0.023 – 0.46	Skin Sens. 1B, H317 Skin Irrit. 2,
Hydroxy	237-539-8 (CAS-No.) 107-75-5 (EC-No.) 203-518-7 (REACH-no)	0.17802 – 0.35604	H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317
Isoeugenol	01-2119973482-31 (CAS-No.) 97-54-1 (EC-No.) 202-590-7 (EC Index-No.) 604-094-00-X; 202- 590-1 (REACH-no) 17-2119417630-49	0.1 – 0.2	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335
ethylene dodecanedioate	(CAS-No.) 54982-83-1 (EC-No.)	0.0023 – 0.11086	Aquatic Acute 1, H400 Aquatic Chronic 3, H412
Damascenone Total	259-423-6 (CAS-No.) 23696-85-7 (EC-No.)	0.05 – 0.1	Skin Sens. 1, H317 Aquatic Chronic 2, H411
Acetaldehyde	245-833-2 (CAS-No.) 75-07-0 (EC-No.) 200-836-8 (EC Index-No.) 605-003-00-6	0.05 – 0.1	Flam. Liq. 1, H224 Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Muta. 2, H341 Carc. 1B, H350 STOT SE 3, H335
Nutmeg Oil	(CAS-No.) 8008-45-5 (EC-No.) 282-013-3;616-921-1	0.05 – 0.1	Flam. Liq. 3, H226 Skin Sens. 1, H317 Muta. 2, H341 Carc. 1B, H350 Asp. Tox. 1, H304 Aquatic Chronic 2, H411

Specific concentration limits:

Name	Product identifier	Specific concentration limits
Isoeugenol	(CAS-No.) 97-54-1 (EC-No.) 202-590-7 (EC Index-No.) 604-094-00-X; 202- 590-1 (REACH-no) 17-2119417630-49	(0.01 ≤C < 100) Skin Sens. 1A, H317

Full text of H-phrases: see section 16

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

First-aid measures general

: IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact

: 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 cautiously with water for several minutes. Remove contact lenses, if present and easy

First-aid measures after ingestion

to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

: Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

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

Symptoms/effects after skin contact

: May cause an allergic skin reaction.

Symptoms/effects after eye contact : Eye irritation.

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 : Water spray. Dry powder. Foam. Carbon dioxide.

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

Protection during firefighting : 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

6.1.1. For non-emergency

personnel Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene. Avoid breathing dust/fume/gas/mist/vapors/spray.

6.1.2. For emergency responders

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

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product 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. Notify authorities if product enters sewers or
Other information : public waters.
: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

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. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Wear personal protective equipment. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.

Hygiene measures : Separate working clothes from town clothes. Launder separately. 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	: Store locked up. Store in a well-ventilated place. Keep
Storage temperature	cool. : 25 °C
Storage area	: Store in a well-ventilated place. Store away from heat.
Special rules on packaging materials	: Store in a closed container.
	: 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

Acetaldehyde (75-07-0)	
Austria - Occupational Exposure Limits	
MAK (mg/m³)	90 mg/m³
MAK (ppm)	50 ppm
MAK Short time value (mg/m³)	90 mg/m³
MAK Short time value (ppm)	50 ppm
OEL - Ceilings (mg/m³)	90 mg/m³
OEL - Ceilings (ppm)	50 ppm
OEL chemical category (AT)	Group B Carcinogen
Bulgaria - Occupational Exposure Limits	
OEL TWA (mg/m³)	30 mg/m³
OEL STEL (mg/m³)	200 mg/m³
Croatia - Occupational Exposure Limits	
GVI (granična vrijednost izloženosti) (mg/m³)	37 mg/m³
GVI (granična vrijednost izloženosti) (ppm)	20 ppm
KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m³)	92 mg/m³
KGVI (kratkotrajna granična vrijednost izloženosti) (ppm)	50 ppm
Czech Republic - Occupational Exposure Limits	
Exposure limits (PEL) (mg/m³)	50 mg/m³
Denmark - Occupational Exposure Limits	
Grænsevædi (loftværdi) (mg/m³)	45 mg/m³
Grænsevædi (loftværdi) (ppm)	25 ppm
Estonia - Occupational Exposure Limits	
OEL TWA (mg/m³)	45 mg/m³
OEL STEL (mg/m³)	90 mg/m³
OEL STEL (ppm)	50 ppm
OEL chemical category (ET)	Carcinogenic substance
Finland - Occupational Exposure Limits	
HTP-arvo (15 min)	46 mg/m³
HTP-arvo (15 min) (ppm)	25 ppm

France - Occupational Exposure Limits	
VME (mg/m ³)	180 mg/m ³
VME (ppm)	100 ppm
OEL chemical category (FR)	Carcinogen category 2
Germany - Occupational Exposure Limits (TRGS 900)	
Occupational exposure limit value (mg/m ³)	91 mg/m ³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Occupational exposure limit value (ppm)	50 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Greece - Occupational Exposure Limits	
OEL TWA (mg/m ³)	180 mg/m ³
OEL TWA (ppm)	100 ppm
OEL STEL (mg/m ³)	270 mg/m ³
OEL STEL (ppm)	150 ppm
Hungary - Occupational Exposure Limits	
Exposure Limit Value	25 mg/m ³
CK-érték	25 mg/m ³
Ireland - Occupational Exposure Limits	
OEL (15 min ref) (mg/m ³)	45 mg/m ³
OEL (15 min ref) (ppm)	25 ppm
Latvia - Occupational Exposure Limits	
OEL TWA (mg/m ³)	5 mg/m ³
Lithuania - Occupational Exposure Limits	
IPRV (mg/m ³)	45 mg/m ³
IPRV (ppm)	25 ppm
TPRV (mg/m ³)	90 mg/m ³
TPRV (ppm)	50 ppm
OEL chemical category (LT)	Carcinogen
Netherlands - Occupational Exposure Limits	
Grenswaarde TGG 8H (mg/m ³)	37 mg/m ³
Grenswaarde TGG 15MIN (mg/m ³)	92 mg/m ³
Poland - Occupational Exposure Limits	
NDSP (mg/m ³)	45 mg/m ³
Portugal - Occupational Exposure Limits	
OEL - Ceilings (ppm)	25 ppm
OEL chemical category (PT)	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
Romania - Occupational Exposure Limits	
OEL TWA (mg/m ³)	90 mg/m ³
OEL TWA (ppm)	50 ppm
OEL STEL (mg/m ³)	180 mg/m ³
OEL STEL (ppm)	100 ppm

Slovakia - Occupational Exposure Limits	
NPHV (priemerná) (mg/m ³)	91 mg/m ³
NPHV (priemerná) (ppm)	50 ppm
Slovenia - Occupational Exposure Limits	
OEL TWA (mg/m ³)	91 mg/m ³
OEL TWA (ppm)	50 ppm
OEL STEL (mg/m ³)	91 mg/m ³
OEL STEL (ppm)	50 ppm
OEL chemical category (SI)	Category 2
Spain - Occupational Exposure Limits	
VLA-EC (mg/m ³)	46 mg/m ³
VLA-EC (ppm)	25 ppm
Sweden - Occupational Exposure Limits	
nivågränsvärde (NVG) (mg/m ³)	45 mg/m ³
nivågränsvärde (NVG) (ppm)	25 ppm
kortidsvärde (KTV) (mg/m ³)	90 mg/m ³
kortidsvärde (KTV) (ppm)	50 ppm
OEL chemical category (SE)	Carcinogen
United Kingdom - Occupational Exposure Limits	
WEL TWA (mg/m ³)	37 mg/m ³
WEL TWA (ppm)	20 ppm
WEL STEL (mg/m ³)	92 mg/m ³
WEL STEL (ppm)	50 ppm
Norway - Occupational Exposure Limits	
TWA (AN) (mg/m ³)	45 mg/m ³
TWA (AN) (ppm)	25 ppm
TWA (Korttidsverdi) (mg/m ³)	67.5 mg/m ³ (value calculated)
TWA (Korttidsverdi) (ppm)	37.5 ppm (value calculated)
OEL chemical category (NO)	Carcinogen
Switzerland - Occupational Exposure Limits	
MAK (mg/m ³)	90 mg/m ³
MAK (ppm)	50 ppm
KZGW (mg/m ³)	90 mg/m ³
KZGW (ppm)	50 ppm
OEL chemical category (CH)	Category C2 carcinogen
USA - ACGIH - Occupational Exposure Limits	
ACGIH Ceiling (ppm)	25 ppm
ACGIH chemical category	Suspected Human Carcinogen

Benzene carboxaldehyde (100-52-7)

Bulgaria - Occupational Exposure Limits	
OEL TWA (mg/m ³)	5 mg/m ³

Finland - Occupational Exposure Limits	
HTP-arvo (8h) (mg/m ³)	4.4 mg/m ³
HTP-arvo (8h) (ppm)	1 ppm
OEL Ceiling (mg/m ³)	17.4 mg/m ³
OEL Ceiling (ppm)	4 ppm
Hungary - Occupational Exposure Limits	
Exposure Limit Value	5 mg/m ³
CK-érték	10 mg/m ³
Latvia - Occupational Exposure Limits	
OEL TWA (mg/m ³)	5 mg/m ³
Lithuania - Occupational Exposure Limits	
IPRV (mg/m ³)	5 mg/m ³
Poland - Occupational Exposure Limits	
NDS (mg/m ³)	10 mg/m ³
NDSCh (mg/m ³)	40 mg/m ³

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Wear respiratory protection.

Personal protective equipment symbol(s):



Environmental exposure

controls: Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: light yellow amber.
Odor	: characteristic.
Odor threshold	: No data available

pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 95 °C (closed cup) ASTM D7094
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: ≈ 1.06
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: No data available

9.2. Other information

No additional information available

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.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Harmful if
Acute toxicity (dermal)	swallowed. : Not
Acute toxicity (inhalation)	classified
	: Not classified

BEES KNEES FO-0066	
ATE CLP (oral)	763.703 mg/kg body weight

Acetaldehyde (75-07-0)	
LD50 oral rat	660 mg/kg

LD50 oral	700 mg/kg body weight
LD50 dermal rabbit	3540 mg/kg
LD50 dermal	3540 mg/kg body weight
LC50 inhalation rat (ppm)	13000 ppm/4h

Damascenone Total (23696-85-7)	
LD50 dermal	2900 mg/kg body weight

Isoeugenol (97-54-1)	
LD50 oral rat	1560 mg/kg
LD50 oral	1500 mg/kg body weight
LD50 dermal	1912 mg/kg body weight

Benzene carboxaldehyde (100-52-7)	
LD50 oral rat	1292 mg/kg
LD50 dermal rabbit	> 1250 mg/kg

Anisic aldehyde (123-11-5)	
LD50 oral rat	> 2000 mg/kg
LD50 oral	3210 mg/kg body weight
LD50 dermal rabbit	> 5000 mg/kg
LC50 inhalation rat (mg/l)	> 0.32 mg/l (Exposure time: 7 h)

Ethyl vanillin crystals (121-32-4)	
LD50 oral rat	1590 mg/kg
LD50 oral	3000 mg/kg body weight

Aldehyde C-14 (104-67-6)	
LD50 oral rat	18500 mg/kg

Verdox (88-41-5)	
LD50 oral rat	4600 mg/kg
LD50 oral	4600 mg/kg body weight

2-Hydroxybenzoic acid, benzyl ester (118-58-1)	
LD50 oral rat	2227 mg/kg
LD50 oral	2200 mg/kg body weight
LD50 dermal rabbit	> 5000 mg/kg

Benzyl benzoate (120-51-4)	
LD50 oral rat	500 mg/kg
LD50 oral	1500 mg/kg body weight
LD50 dermal rabbit	4000 mg/kg
LD50 dermal	4000 mg/kg body weight

Tetrahydrolinalool (78-69-3)

LD50 oral rat	> 5 g/kg
LD50 dermal rabbit	> 5000 mg/kg

Majantol (103694-68-4)

LD50 oral	3440 mg/kg body weight
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ethylene dodecanedioate (54982-83-1)

LD50 oral	4500 mg/kg body weight
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Hydroxy (107-75-5)

LD50 oral rat	> 5 g/kg
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Nutmeg Oil (8008-45-5)

LD50 oral rat	2620 mg/kg
LD50 dermal rabbit	> 10 g/kg

Skin corrosion/irritation Serious eye damage/irritation	: Not classified : Causes serious eye irritation.
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer.

Acetaldehyde (75-07-0)

IARC group	1 - Carcinogenic to humans, 2B - Possibly carcinogenic to humans
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Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated	: Not classified
exposure Aspiration	: Not classified

hazard

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Toxic to aquatic life with long lasting effects.

Acetaldehyde (75-07-0)

LC50 fish 1	28.0 – 34.0 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	53 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	3.64 – 6.15 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
EC50 Daphnia 2	48.3 mg/l (Exposure time: 48 h - Species: Daphnia magna)

Benzene carboxaldehyde (100-52-7)

LC50 fish 1	10.6 – 11.8 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
LC50 fish 2	12.69 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

Ethyl vanillin crystals (121-32-4)

LC50 fish 1	81.4 – 94.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
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Aldehyde C-14 (104-67-6)

LC50 fish 1	569 mg/l 96 h
EC50 Daphnia 1	5.85 mg/l 48 h
EC50 other aquatic organisms 1	5.94 mg/l 72 h

2-Hydroxybenzoic acid, benzyl ester (118-58-1)

LC50 fish 1	1.03 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static])
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Benzyl benzoate (120-51-4)

LC50 fish 1	2.32 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static])
NOEC (chronic)	0.168 mg/l

Tetrahydrolinalool (78-69-3)

LC50 fish 1	8.9 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static])
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ethylene dodecanedioate (54982-83-1)

LC50 fish 1	0.88 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
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12.2. Persistence and degradability

Benzyl benzoate (120-51-4)

Persistence and degradability	May cause long-term adverse effects in the environment.
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12.3. Bioaccumulative potential

Acetaldehyde (75-07-0)

Partition coefficient n-octanol/water (Log Pow)	0.5
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Benzene carboxaldehyde (100-52-7)

BCF fish 1	(no significant bioaccumulation)
Partition coefficient n-octanol/water (Log Pow)	1.48 (at 20 °C)

Benzyl benzoate (120-51-4)

Partition coefficient n-octanol/water (Log Pow)	4
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's instructions.

SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR)	: UN 3082
UN-No. (IMDG)	: UN 3082
UN-No. (IATA)	: UN 3082
UN-No. (ADN)	: UN 3082
UN-No. (RID)	: UN 3082

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IMDG)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IATA)	: Environmentally hazardous substance, liquid, n.o.s.
Proper Shipping Name (ADN)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (RID) Transport document description (ADR)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benzyl Benzoate), 9, III, (-)
Transport document description (IMDG)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benzyl Benzoate), 9, III, MARINE POLLUTANT : UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Benzyl Benzoate), 9, III
Transport document description (IATA)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benzyl Benzoate), 9, III
Transport document description (ADN)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III
Transport document description (RID)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es)	: 9
(ADR) Hazard labels (ADR)	: 9



IMDG

Transport hazard class(es)	: 9
(IMDG) Hazard labels (IMDG)	: 9



IATA

Transport hazard class(es)	: 9
(IATA) Hazard labels (IATA)	: 9

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ADN

Transport hazard class(es)	:	9
(ADN) Hazard labels (ADN)	:	9

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RID

Transport hazard class(es)	:	9
(RID) Hazard labels (RID)	:	9

	:		
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14.4. Packing group

Packing group (ADR)	:	III
Packing group	:	III
(IMDG) Packing	:	III
group (IATA) Packing	:	III
group (ADN) Packing	:	III
group (RID)	:	III

14.5. Environmental hazards

Dangerous for the	:		Yes
environment Marine pollutant	:		Yes
Other information	:	No	supplementary information available

14.6. Special precautions for user

Overland transport Classification

code (ADR) Special provision	:	M6
(ADR)	:	274, 335, 375, 601
Limited quantities (ADR) Excepted	:	5I
quantities (ADR) Packing	:	E1
instructions (ADR) Special packing	:	P001, IBC03, LP01,R001
provisions (ADR) Mixed packing	:	PP1
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.) Orange plates	:	90
	:	



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

Transport by sea

Special provision (IMDG)	: 274, 335, 969
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP01, P001
Packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP2, TP29
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
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 provision (IATA)	: A97, A158, A197
ERG code (IATA)	: 9L

Inland waterway transport

Classification code (ADN)	: M6
Special provision (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 provision (RID)	: 274, 335, 375, 601
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01,
Special packing provisions (RID)	R001 : 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. Transport in bulk according to Annex II of Marpol and the IBC Code

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

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:	
Reference code	Applicable
3(a)	Acetaldehyde ; Nutmeg Oil

3(b)	BEES KNEES; Benzyl benzoate ; Benzene carboxaldehyde ; Damascenone Total ; Acetaldehyde ; Isoeugenol ; 2-Hydroxybenzoic acid, benzyl ester ; Majantol ; Mayol ; Hydroxy ; Tetrahydrolinalool ; Nutmeg Oil
3(c)	BEES KNEES ; Benzyl benzoate ; Verdox ; Damascenone Total ; Aldehyde C-14 ; 2-Hydroxybenzoic acid, benzyl ester ; Anisic aldehyde ; Majantol ; ethylene dodecanedioate ; Nutmeg Oil
40.	Acetaldehyde ; Nutmeg Oil

Contains no REACH candidate substance

Contains no REACH Annex XIV substances.

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance(s) subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

Germany

Water hazard class (WGK)

: WGK 2, significant hazardous to water (Classification according to AwSV, Annex

Hazardous Incident Ordinance (12. BImSchV)

1) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen

: Acetaldehyde is listed

SZW-lijst van mutagene stoffen

: None of the components are listed

NIET-limitatieve lijst van voor de

: None of the components are listed

voortplanting giftige stoffen – Borstvoeding

NIET-limitatieve lijst van voor de

: None of the components are

voortplanting giftige stoffen – Vruchtbaarheid

NIET-limitatieve lijst van voor de

listed : None of the components

voortplanting giftige stoffen – Ontwikkeling

Denmark

are listed

Class for fire hazard

: Class III-1

Store unit

: 50 liter

Classification remarks

: Flammable according to the Danish Ministry of Justice; 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

The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BLV	Biological limit value
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard

IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class

Full text of H- and EUH-phrases:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) 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 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
Carc. 1B	Carcinogenicity Category 1B
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 1	Flammable liquids Category 1
Flam. Liq. 3	Flammable liquids Category 3
Muta. 2	Germ cell mutagenicity Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization, Category 1
Skin Sens. 1A	Skin sensitization, Category 1A
Skin Sens. 1B	Skin sensitization, Category 1B
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H224	Extremely flammable liquid and vapor.
H226	Flammable liquid and vapor.
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.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

SDS EU (REACH Annex II)

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.