

NASHI PEAR & HONEY FO-0100

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	: NASHI PEAR & HONEY FO-0100
UFI	: WR9P-D0RH-V004-N7RE
Product code	: FO-0100
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 use
Industrial/Professional use spec	: 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]

Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Skin sensitisation, Category 1	H317
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

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

2.2. Label elements

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

[CLP] Hazard pictograms (CLP)



GHS07

GHS09

Signal word (CLP)

: Warning

Contains	: Coumarin crystals; Hexyl cinnamic aldehyde; Cinnamic aldehyde; Heliotropine crystals; Neryl acetate; d-Limonene; Eugenol; Geranyl acetate; Triplal (Vertocitral); Hydroxy
Hazard statements (CLP)	: H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P264 - Wash hands, forearms and face thoroughly after handling. 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. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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]
Verdorex	(CAS-No.) 88-41-5 (EC-No.) 201-828-7 (REACH-no) 01-2119970713-33	3.65 – 7.3	Aquatic Chronic 2, H411
Geranyl acetate	(CAS-No.) 105-87-3 (EC-No.) 203-341-5 (REACH-no) 01-2119973480-35	3.3 – 6.6	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 3, H412
Cinnamic aldehyde	(CAS-No.) 104-55-2 (EC-No.) 203-213-9 (REACH-no) 01-2119935242-45	2.75 – 5.5	Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
Eugenol	(CAS-No.) 97-53-0 (EC-No.) 202-589-1 (REACH-no) 01-2119971802-33	2.75 – 5.5	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Sens. 1B, H317
Neryl acetate	(CAS-No.) 141-12-8 (EC-No.) 205-459-2	1.45 – 2.9	Skin Sens. 1B, H317
Citronellyl acetate (mixed Isomers)	(CAS-No.) 150-84-5 (EC-No.) 205-775-0	1.2 – 2.4	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 2, H411
d-Limonene	(CAS-No.) 5989-27-5 (EC-No.) 227-813-5 (EC Index-No.) 601-029-00-7 (REACH-no) 01-2119493353-35	0.9 – 1.8	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Aldehyde C-14	(CAS-No.) 104-67-6 (EC-No.) 203-225-4 (REACH-no) 01-2119959333-34	0.85 – 1.7	Aquatic Chronic 3, H412

Veltol plus crystals	(CAS-No.) 4940-11-8 (EC-No.) 225-582-5	0.83 – 1.66	Acute Tox. 4 (Oral), H302
Isobutyl acetate	(CAS-No.) 110-19-0 (EC-No.) 203-745-1 (EC Index-No.) 607-026-00-7	0.75 – 1.5	Flam. Liq. 2, H225 STOT SE 3, H336
Hexyl cinnamic aldehyde	(CAS-No.) 101-86-0 (EC-No.) 202-983-3 (REACH-no) 01-2119533092-50	0.7 – 1.4	Skin Sens. 1, H317 Aquatic Chronic 2, H411
Ethylene brassylate	(CAS-No.) 105-95-3 (EC-No.) 203-347-8 (REACH-no) 01-2119976314-33	0.65 – 1.3	Aquatic Chronic 2, H411
Heliotropine crystals	(CAS-No.) 120-57-0 (EC-No.) 204-409-7 (REACH-no) 01-2119983608-21	0.5 – 1	Skin Sens. 1B, H317
Butylated hydroxytoluene (BHT) crystals	(CAS-No.) 128-37-0 (EC-No.) 204-881-4 (REACH-no) 01-2119480433-40	0.45 – 0.9	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Isoamyl acetate substance with a Community workplace exposure limit	(CAS-No.) 123-92-2 (EC-No.) 204-662-3 (EC Index-No.) 607-130-00-2 (REACH-no) 01-2119548408-32	0.2 – 0.4	Flam. Liq. 3, H226
Triplal (Vertocital)	(CAS-No.) 68039-49-6 (EC-No.) 268-264-1	0.2 – 0.4	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412
Diphenyl oxide substance with a Community workplace exposure limit	(CAS-No.) 101-84-8 (EC-No.) 202-981-2 (REACH-no) 01-2119472545-33	0.15 – 0.3	Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Hydroxy	(CAS-No.) 107-75-5 (EC-No.) 203-518-7 (REACH-no) 01-2119973482-31	0.1499844 – 0.2999688	Eye Irrit. 2, H319 Skin Sens. 1B, H317
Coumarin crystals	(CAS-No.) 91-64-5 (EC-No.) 202-086-7 (REACH-no) 01-2119943756-26	0.1 – 0.2	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Skin Sens. 1, H317 Aquatic Chronic 2, H411

Full text of H-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 immediate medical advice/attention. Get medical advice/attention. Specific treatment (see Call a physician immediately on this label). Wash contaminated clothing before reuse. 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	: If eye irritation persists: Get immediate medical advice/attention. Get medical advice/attention. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
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	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Causes serious eye irritation. 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	: 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

Fire hazard	: Combustible liquid.
Explosion hazard	: May form flammable/explosive vapour-air 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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.
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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.
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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.
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Methods for cleaning up	: Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: Handle empty containers with care because residual vapours are flammable. Keep away from heat, sparks and flame. No smoking.
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. No open flames. No smoking. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray.
Hygiene measures	: Wash hands thoroughly after handling. Wash contaminated clothing before reuse. 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.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Proper grounding procedures to avoid static electricity should be followed.
Storage conditions	: Keep only in the original container in a cool, well ventilated place away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container closed when not in use. Keep in fireproof place. Store in a well-ventilated place. Keep cool.
Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight. Heat sources.
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

Diphenyl oxide (101-84-8)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	7 mg/m ³
IOEL TWA [ppm]	1 ppm
IOEL STEL	14 mg/m ³
IOEL STEL [ppm]	2 ppm
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	7 mg/m ³
MAK (OEL TWA) [ppm]	1 ppm
MAK (OEL STEL)	14 mg/m ³
MAK (OEL STEL) [ppm]	2 ppm

Diphenyl oxide (101-84-8)	
Belgium - Occupational Exposure Limits	
OEL TWA	7 mg/m ³ (vapor)
OEL TWA [ppm]	1 ppm (vapor)
OEL STEL	14 mg/m ³ (vapor)
OEL STEL [ppm]	2 ppm (vapor)
Bulgaria - Occupational Exposure Limits	
OEL TWA	7 mg/m ³
OEL TWA [ppm]	1 ppm
OEL STEL	14 mg/m ³
OEL STEL [ppm]	2 ppm
Croatia - Occupational Exposure Limits	
GVI (OEL TWA) [1]	7 mg/m ³
GVI (OEL TWA) [2]	1 ppm
KGVI (OEL STEL)	14 mg/m ³
KGVI (OEL STEL) [ppm]	2 ppm
Cyprus - Occupational Exposure Limits	
OEL TWA	7 mg/m ³
OEL TWA [ppm]	1 ppm
OEL STEL	14 mg/m ³
OEL STEL [ppm]	2 ppm
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	5 mg/m ³
Denmark - Occupational Exposure Limits	
OEL TWA [1]	7 mg/m ³
OEL TWA [2]	1 ppm
Estonia - Occupational Exposure Limits	
OEL TWA	7 mg/m ³
OEL TWA [ppm]	1 ppm
OEL STEL	14 mg/m ³
OEL STEL [ppm]	2 ppm
Finland - Occupational Exposure Limits	
HTP (OEL TWA) [1]	7 mg/m ³
HTP (OEL TWA) [2]	1 ppm
HTP (OEL STEL)	14 mg/m ³
HTP (OEL STEL) [ppm]	2 ppm
France - Occupational Exposure Limits	
VME (OEL TWA)	7 mg/m ³
VME (OEL TWA) [ppm]	1 ppm
Chemical category	Risk of cutaneous absorption

Diphenyl oxide (101-84-8)	
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA) [1]	7.1 mg/m ³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed-vapor)
AGW (OEL TWA) [2]	1 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed-vapor)
Gibraltar - Occupational Exposure Limits	
OEL TWA	7 mg/m ³
OEL TWA [ppm]	1 ppm
OEL STEL	14 mg/m ³
OEL STEL [ppm]	200 ppm
Greece - Occupational Exposure Limits	
OEL TWA	7 mg/m ³
OEL TWA [ppm]	1 ppm
OEL STEL	14 mg/m ³
OEL STEL [ppm]	2 ppm
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	7 mg/m ³
CK (OEL STEL)	14 mg/m ³
Ireland - Occupational Exposure Limits	
OEL TWA [1]	7 mg/m ³ (vapour)
OEL TWA [2]	1 ppm (vapour)
OEL STEL	14 mg/m ³ (vapour)
OEL STEL [ppm]	2 ppm (vapour)
Italy - Occupational Exposure Limits	
OEL TWA	7 mg/m ³
OEL TWA [ppm]	1 ppm
Latvia - Occupational Exposure Limits	
OEL TWA	7 mg/m ³
OEL TWA [ppm]	1 ppm
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	7 mg/m ³
IPRV (OEL TWA) [ppm]	1 ppm
TPRV (OEL STEL)	14 mg/m ³
TPRV (OEL STEL) [ppm]	2 ppm
Luxembourg - Occupational Exposure Limits	
OEL TWA	7 mg/m ³
OEL TWA [ppm]	1 ppm
OEL STEL	14 mg/m ³
OEL STEL [ppm]	2 ppm
Malta - Occupational Exposure Limits	
OEL TWA	7 mg/m ³

Diphenyl oxide (101-84-8)	
OEL TWA [ppm]	1 ppm
OEL STEL	14 mg/m ³
OEL STEL [ppm]	2 ppm
Netherlands - Occupational Exposure Limits	
MAC-TGG (OEL TWA)	7 mg/m ³
MAC-15 (OEL STEL)	14 mg/m ³
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	7 mg/m ³
NDSch (OEL STEL)	14 mg/m ³
Portugal - Occupational Exposure Limits	
OEL TWA	7 mg/m ³
OEL TWA [ppm]	1 ppm (vapor)
OEL STEL	14 mg/m ³ (indicative limit value)
OEL STEL [ppm]	2 ppm (indicative limit value-vapor)
Romania - Occupational Exposure Limits	
OEL TWA	5 mg/m ³
OEL TWA [ppm]	0.7 ppm
OEL STEL	10 mg/m ³
OEL STEL [ppm]	1.4 ppm
Slovakia - Occupational Exposure Limits	
NPHV (OEL TWA) [1]	7 mg/m ³
NPHV (OEL TWA) [2]	1 ppm
NPHV (OEL C)	7.1 mg/m ³
Slovenia - Occupational Exposure Limits	
OEL TWA	7 mg/m ³
OEL TWA [ppm]	1 ppm
OEL STEL	14 mg/m ³
OEL STEL [ppm]	2 ppm
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA) [1]	7.1 mg/m ³ (vapor)
VLA-ED (OEL TWA) [2]	1 ppm (vapor)
VLA-EC (OEL STEL)	14.2 mg/m ³ (vapor)
VLA-EC (OEL STEL) [ppm]	2 ppm (vapor)
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	7 mg/m ³
NGV (OEL TWA) [ppm]	1 ppm
KTV (OEL STEL)	14 mg/m ³
KTV (OEL STEL) [ppm]	2 ppm
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	7.1 mg/m ³ (vapour)

Diphenyl oxide (101-84-8)	
WEL TWA (OEL TWA) [2]	1 ppm (vapour)
WEL STEL (OEL STEL)	21.3 mg/m ³ (calculated-vapour)
WEL STEL (OEL STEL) [ppm]	3 ppm (calculated-vapour)
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA) [1]	7 mg/m ³
Grenseverdi (OEL TWA) [2]	1 ppm
Korttidsverdi (OEL STEL)	14 mg/m ³ (value from the regulation)
Korttidsverdi (OEL STEL) [ppm]	2 ppm (value from the regulation)
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA) [1]	7 mg/m ³ (aerosol, vapour)
MAK (OEL TWA) [2]	1 ppm (aerosol, vapour)
KZGW (OEL STEL)	14 mg/m ³ (aerosol, vapour)
KZGW (OEL STEL) [ppm]	2 ppm (aerosol, vapour)
Chemical category	Category 2 developmental toxin, Category 2 reproductive toxin
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	1 ppm (vapor)
ACGIH OEL STEL [ppm]	2 ppm (vapor fraction)

Butylated hydroxytoluene (BHT) crystals (128-37-0)	
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	10 mg/m ³
Belgium - Occupational Exposure Limits	
OEL TWA	2 mg/m ³ (aerosol and vapor)
Bulgaria - Occupational Exposure Limits	
OEL TWA	10 mg/m ³
OEL STEL	50 mg/m ³
Croatia - Occupational Exposure Limits	
GVI (OEL TWA) [1]	10 mg/m ³
Denmark - Occupational Exposure Limits	
OEL TWA [1]	10 mg/m ³
Finland - Occupational Exposure Limits	
HTP (OEL TWA) [1]	10 mg/m ³
HTP (OEL STEL)	20 mg/m ³
France - Occupational Exposure Limits	
VME (OEL TWA)	10 mg/m ³
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA) [1]	10 mg/m ³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed-inhalable fraction)
Greece - Occupational Exposure Limits	
OEL TWA	10 mg/m ³

Butylated hydroxytoluene (BHT) crystals (128-37-0)	
Ireland - Occupational Exposure Limits	
OEL TWA [1]	2 mg/m ³
OEL STEL	6 mg/m ³ (calculated)
Portugal - Occupational Exposure Limits	
OEL TWA	2 mg/m ³ (inhalable fraction, aerosol and vapor)
Chemical category	A4 - Not Classifiable as a Human Carcinogen
Slovenia - Occupational Exposure Limits	
OEL TWA	10 mg/m ³ (inhalable fraction)
OEL STEL	40 mg/m ³ (inhalable fraction)
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA) [1]	10 mg/m ³
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	10 mg/m ³
WEL STEL (OEL STEL)	30 mg/m ³ (calculated)
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA) [1]	10 mg/m ³ (aerosol, inhalable dust, vapour)
KZGW (OEL STEL)	40 mg/m ³ (aerosol, inhalable dust, vapour)
Chemical category	Category C1B carcinogen carcinogenic with threshold value
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	2 mg/m ³ (inhalable fraction and vapor)
ACGIH chemical category	Not Classifiable as a Human Carcinogen

Isobutyl acetate (110-19-0)	
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	480 mg/m ³ (Butyl acetates)
MAK (OEL TWA) [ppm]	100 ppm (Butyl acetates)
MAK (OEL STEL)	480 mg/m ³ (Butyl acetate)
MAK (OEL STEL) [ppm]	100 ppm (Butyl acetate)
OEL C	480 mg/m ³ (Butyl acetate, all isomers)
OEL C [ppm]	100 ppm (Butyl acetate, all isomers)
Belgium - Occupational Exposure Limits	
OEL TWA	238 mg/m ³
OEL TWA [ppm]	50 ppm
OEL STEL	712 mg/m ³
OEL STEL [ppm]	150 ppm
Croatia - Occupational Exposure Limits	
GVI (OEL TWA) [1]	724 mg/m ³
GVI (OEL TWA) [2]	150 ppm
KGVI (OEL STEL)	903 mg/m ³
KGVI (OEL STEL) [ppm]	187 ppm

Isobutyl acetate (110-19-0)	
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	950 mg/m ³
Denmark - Occupational Exposure Limits	
OEL TWA [1]	710 mg/m ³ (Butyl acetate, all isomers)
OEL TWA [2]	150 ppm (Butyl acetate, all isomers)
Finland - Occupational Exposure Limits	
HTP (OEL TWA) [1]	240 mg/m ³ (Butyl acetate)
HTP (OEL TWA) [2]	50 ppm (Butyl acetate)
HTP (OEL STEL)	725 mg/m ³ (Butyl acetate)
HTP (OEL STEL) [ppm]	150 ppm (Butyl acetate)
France - Occupational Exposure Limits	
VME (OEL TWA)	710 mg/m ³
VME (OEL TWA) [ppm]	150 ppm
VLE (OEL C/STEL)	940 mg/m ³
VLE (OEL C/STEL) [ppm]	200 ppm
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA) [1]	300 mg/m ³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
AGW (OEL TWA) [2]	62 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	950 mg/m ³
OEL TWA [ppm]	200 ppm
OEL STEL	950 mg/m ³
OEL STEL [ppm]	200 ppm
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	241 mg/m ³
CK (OEL STEL)	723 mg/m ³
Chemical category	Sensitizer
Ireland - Occupational Exposure Limits	
OEL TWA [1]	700 mg/m ³
OEL TWA [2]	150 ppm
OEL STEL	2100 mg/m ³ (calculated)
OEL STEL [ppm]	450 ppm (calculated)
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	240 mg/m ³
NDSch (OEL STEL)	720 mg/m ³
Portugal - Occupational Exposure Limits	
OEL TWA [ppm]	150 ppm
Romania - Occupational Exposure Limits	
OEL TWA	715 mg/m ³

Isobutyl acetate (110-19-0)	
OEL TWA [ppm]	150 ppm
OEL STEL	950 mg/m ³
OEL STEL [ppm]	200 ppm
Slovakia - Occupational Exposure Limits	
NPHV (OEL TWA) [1]	480 mg/m ³
NPHV (OEL TWA) [2]	100 ppm
NPHV (OEL C)	700 mg/m ³
Slovenia - Occupational Exposure Limits	
OEL TWA	300 mg/m ³
OEL TWA [ppm]	62 ppm
OEL STEL	600 mg/m ³
OEL STEL [ppm]	124 ppm
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA) [1]	724 mg/m ³
VLA-ED (OEL TWA) [2]	150 ppm
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	500 mg/m ³ (Butyl acetates)
NGV (OEL TWA) [ppm]	100 ppm (Butyl acetates)
KTV (OEL STEL)	700 mg/m ³ (Butyl acetates)
KTV (OEL STEL) [ppm]	150 ppm (Butyl acetates)
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	724 mg/m ³
WEL TWA (OEL TWA) [2]	150 ppm
WEL STEL (OEL STEL)	903 mg/m ³
WEL STEL (OEL STEL) [ppm]	187 ppm
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA) [1]	480 mg/m ³
MAK (OEL TWA) [2]	100 ppm
KZGW (OEL STEL)	960 mg/m ³
KZGW (OEL STEL) [ppm]	200 ppm
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	50 ppm (Butyl acetates, all isomers)
ACGIH OEL STEL [ppm]	150 ppm (Butyl acetates, all isomers)

Isoamyl acetate (123-92-2)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	270 mg/m ³
IOEL TWA [ppm]	50 ppm
IOEL STEL	540 mg/m ³
IOEL STEL [ppm]	100 ppm

Isoamyl acetate (123-92-2)	
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	270 mg/m ³ (Pentyl acetate (all isomers))
MAK (OEL TWA) [ppm]	50 ppm (Pentyl acetate (all isomers))
MAK (OEL STEL)	540 mg/m ³ (Pentylacetate)
MAK (OEL STEL) [ppm]	100 ppm (Pentylacetate)
Belgium - Occupational Exposure Limits	
OEL TWA	270 mg/m ³
OEL TWA [ppm]	50 ppm
OEL STEL	540 mg/m ³
OEL STEL [ppm]	100 ppm
Bulgaria - Occupational Exposure Limits	
OEL TWA	270 mg/m ³
OEL TWA [ppm]	50 ppm
OEL STEL	540 mg/m ³
OEL STEL [ppm]	100 ppm
Croatia - Occupational Exposure Limits	
GVI (OEL TWA) [1]	270 mg/m ³
GVI (OEL TWA) [2]	50 ppm
KGVI (OEL STEL)	540 mg/m ³
KGVI (OEL STEL) [ppm]	100 ppm
Cyprus - Occupational Exposure Limits	
OEL TWA	270 mg/m ³
OEL TWA [ppm]	50 ppm
OEL STEL	540 mg/m ³
OEL STEL [ppm]	100 ppm
Denmark - Occupational Exposure Limits	
OEL TWA [1]	271 mg/m ³ (Amyl acetate, all isomers)
OEL TWA [2]	50 ppm (Amyl acetate, all isomers)
Estonia - Occupational Exposure Limits	
OEL TWA	270 mg/m ³
OEL TWA [ppm]	50 ppm
OEL STEL	540 mg/m ³
OEL STEL [ppm]	100 ppm
Finland - Occupational Exposure Limits	
HTP (OEL TWA) [1]	270 mg/m ³ (Pentyl acetate)
HTP (OEL TWA) [2]	50 ppm (Pentyl acetate)
HTP (OEL STEL)	540 mg/m ³
HTP (OEL STEL) [ppm]	100 ppm
France - Occupational Exposure Limits	
VME (OEL TWA)	270 mg/m ³ (restrictive limit)

Isoamyl acetate (123-92-2)	
VME (OEL TWA) [ppm]	50 ppm (restrictive limit)
VLE (OEL C/STEL)	540 mg/m ³ (restrictive limit)
VLE (OEL C/STEL) [ppm]	100 ppm (restrictive limit)
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA) [1]	270 mg/m ³
AGW (OEL TWA) [2]	50 ppm
Gibraltar - Occupational Exposure Limits	
OEL TWA	270 mg/m ³
OEL TWA [ppm]	50 ppm
OEL STEL	540 mg/m ³
OEL STEL [ppm]	100 ppm
Greece - Occupational Exposure Limits	
OEL TWA	530 mg/m ³
OEL TWA [ppm]	100 ppm
OEL STEL	800 mg/m ³
OEL STEL [ppm]	150 ppm
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	270 mg/m ³
CK (OEL STEL)	540 mg/m ³
Ireland - Occupational Exposure Limits	
OEL TWA [1]	260 mg/m ³
OEL TWA [2]	50 ppm
OEL STEL	520 mg/m ³
OEL STEL [ppm]	100 ppm
Italy - Occupational Exposure Limits	
OEL TWA	270 mg/m ³
OEL TWA [ppm]	50 ppm
OEL STEL	540 mg/m ³
OEL STEL [ppm]	100 ppm
Latvia - Occupational Exposure Limits	
OEL TWA	270 mg/m ³
OEL TWA [ppm]	50 ppm
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	270 mg/m ³
IPRV (OEL TWA) [ppm]	50 ppm
TPRV (OEL STEL)	540 mg/m ³
TPRV (OEL STEL) [ppm]	100 ppm
Luxembourg - Occupational Exposure Limits	
OEL TWA	270 mg/m ³
OEL TWA [ppm]	50 ppm

Isoamyl acetate (123-92-2)	
OEL STEL	540 mg/m ³
OEL STEL [ppm]	100 ppm
Malta - Occupational Exposure Limits	
OEL TWA	270 mg/m ³
OEL TWA [ppm]	50 ppm
OEL STEL	540 mg/m ³
OEL STEL [ppm]	100 ppm
Netherlands - Occupational Exposure Limits	
MAC-15 (OEL STEL)	530 mg/m ³
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	250 mg/m ³
NDSch (OEL STEL)	500 mg/m ³
Portugal - Occupational Exposure Limits	
OEL TWA	270 mg/m ³ (indicative limit value)
OEL TWA [ppm]	50 ppm (indicative limit value)
OEL STEL	540 mg/m ³ (indicative limit value)
OEL STEL [ppm]	100 ppm (indicative limit value, regulated under Pentyl acetate, all isomers)
Romania - Occupational Exposure Limits	
OEL TWA	270 mg/m ³
OEL TWA [ppm]	50 ppm
OEL STEL	540 mg/m ³
OEL STEL [ppm]	100 ppm
Slovakia - Occupational Exposure Limits	
NPHV (OEL TWA) [1]	270 mg/m ³
NPHV (OEL TWA) [2]	50 ppm
NPHV (OEL C)	540 mg/m ³
Slovenia - Occupational Exposure Limits	
OEL TWA	270 mg/m ³
OEL TWA [ppm]	50 ppm
OEL STEL	540 mg/m ³
OEL STEL [ppm]	100 ppm
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA) [1]	270 mg/m ³ (indicative limit value)
VLA-ED (OEL TWA) [2]	50 ppm (indicative limit value)
VLA-EC (OEL STEL)	540 mg/m ³
VLA-EC (OEL STEL) [ppm]	100 ppm
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	270 mg/m ³ (Pentyl acetates)
NGV (OEL TWA) [ppm]	50 ppm (Pentyl acetates)
KTV (OEL STEL)	540 mg/m ³ (Pentyl acetates)

Isoamyl acetate (123-92-2)	
KTV (OEL STEL) [ppm]	100 ppm (Pentyl acetates)
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA) [1]	260 mg/m ³
Grenseverdi (OEL TWA) [2]	50 ppm
Korttidsverdi (OEL STEL)	325 mg/m ³ (value calculated)
Korttidsverdi (OEL STEL) [ppm]	75 ppm (value calculated)
Turkey - Occupational Exposure Limits	
OEL TWA	270 mg/m ³
OEL TWA [ppm]	50 ppm
OEL STEL	540 mg/m ³
OEL STEL [ppm]	100 ppm
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	50 ppm (Pentyl acetate, all isomers)
ACGIH OEL STEL [ppm]	100 ppm (Pentyl acetate, all isomers)

d-Limonene (5989-27-5)	
Finland - Occupational Exposure Limits	
HTP (OEL TWA) [1]	140 mg/m ³
HTP (OEL TWA) [2]	25 ppm
HTP (OEL STEL)	280 mg/m ³
HTP (OEL STEL) [ppm]	50 ppm
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA) [1]	28 mg/m ³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
AGW (OEL TWA) [2]	5 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Chemical category	Skin notation, Skin sensitization
Slovenia - Occupational Exposure Limits	
OEL TWA	28 mg/m ³
OEL TWA [ppm]	5 ppm
OEL STEL	112 mg/m ³
OEL STEL [ppm]	20 ppm
Chemical category	Potential for cutaneous absorption
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA) [1]	168 mg/m ³
VLA-ED (OEL TWA) [2]	30 ppm
Chemical category	Sensitizer, skin - potential for cutaneous absorption
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA) [1]	140 mg/m ³
Grenseverdi (OEL TWA) [2]	25 ppm
Korttidsverdi (OEL STEL)	175 mg/m ³ (value calculated)

d-Limonene (5989-27-5)	
Kortidsverdi (OEL STEL) [ppm]	37.5 ppm (value calculated)
Chemical category	Sensitizing substance
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA) [1]	40 mg/m ³
MAK (OEL TWA) [2]	7 ppm
KZGW (OEL STEL)	80 mg/m ³
KZGW (OEL STEL) [ppm]	14 ppm
Chemical category	Sensitizer

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



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:

Wear protective gloves.

8.2.2.3. Respiratory protection

Respiratory protection:

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.
Odour	: characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 65 °C (closed cup) ASTM D7094
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: ≈ 0.95
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
Oxidising properties	: No data available
Explosive 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

Combustible liquid. May form flammable/explosive vapour-air mixture. Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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

Aldehyde C-14 (104-67-6)	
LD50 oral rat	18500 mg/kg
LD50 dermal rat	> 2000 mg/kg

Diphenyl oxide (101-84-8)	
LD50 oral rat	2450 mg/kg
LD50 oral	2830 mg/kg bodyweight
LD50 dermal rabbit	> 7940 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	1.5 mg/l/4h

Butylated hydroxytoluene (BHT) crystals (128-37-0)	
LD50 oral rat	> 2930 mg/kg
LD50 dermal rat	> 2000 mg/kg

Isobutyl acetate (110-19-0)	
LD50 oral rat	15400 mg/kg
LD50 dermal rabbit	> 17400 mg/kg

Citronellyl acetate (mixed Isomers) (150-84-5)	
LD50 oral rat	6800 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Coumarin crystals (91-64-5)	
LD50 oral rat	> 5000 mg/kg
LD50 oral	500 mg/kg bodyweight
LD50 dermal rat	293 mg/kg

Ethylene brassylate (105-95-3)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg

Eugenol (97-53-0)	
LD50 oral rat	1930 mg/kg
LD50 oral	2500 mg/kg bodyweight

Geranyl acetate (105-87-3)

LD50 oral rat	6330 mg/kg
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Hexyl cinnamic aldehyde (101-86-0)

LD50 oral rat	3100 mg/kg
LD50 oral	3100 mg/kg bodyweight
LD50 dermal rabbit	> 3000 mg/kg
LC50 Inhalation - Rat	> 5 mg/l/4h

Heliotropine crystals (120-57-0)

LD50 oral rat	2700 mg/kg
LD50 oral	2700 mg/kg bodyweight
LD50 dermal rat	> 5000 mg/kg

d-Limonene (5989-27-5)

LD50 oral rat	4400 mg/kg
LD50 dermal rabbit	> 5 g/kg

Veltol plus crystals (4940-11-8)

LD50 oral rat	1150 mg/kg
LD50 oral	1200 mg/kg bodyweight
LD50 dermal rabbit	> 5000 mg/kg

Neryl acetate (141-12-8)

LD50 oral rat	> 5 g/kg
LD50 dermal rabbit	> 6 ml/kg

Triplal (Vertocitral) (68039-49-6)

LD50 oral	3900 mg/kg bodyweight
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Verdox (88-41-5)

LD50 oral rat	4600 mg/kg
LD50 oral	4600 mg/kg bodyweight

Cinnamic aldehyde (104-55-2)

LD50 oral rat	2220 mg/kg
LD50 oral	2500 mg/kg bodyweight
LD50 dermal rabbit	1260 mg/kg
LD50 dermal	1100 mg/kg bodyweight

Hydroxy (107-75-5)

LD50 oral rat	> 5 g/kg
LD50 dermal rabbit	> 2000 mg/kg

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

Butylated hydroxytoluene (BHT) crystals (128-37-0)

IARC group	3 - Not classifiable
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Coumarin crystals (91-64-5)

IARC group	3 - Not classifiable
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Eugenol (97-53-0)

IARC group	3 - Not classifiable
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d-Limonene (5989-27-5)

IARC group	3 - Not classifiable
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Reproductive toxicity : Not classified

STOT-single exposure : Not classified

Isobutyl acetate (110-19-0)

STOT-single exposure	May cause drowsiness or dizziness.
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STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

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

Aldehyde C-14 (104-67-6)

LC50 - Fish [1]	569 mg/l 96 h
EC50 - Crustacea [1]	5.85 mg/l 48 h
EC50 - Other aquatic organisms [1]	5.94 mg/l 72 h

Butylated hydroxytoluene (BHT) crystals (128-37-0)

EC50 72h - Algae [1]	6 mg/l (Species: Pseudokirchneriella subcapitata)
EC50 72h - Algae [2]	> 0.42 mg/l (Species: Desmodesmus subspicatus)

Isobutyl acetate (110-19-0)	
LC50 - Fish [1]	17 mg/l (Exposure time: 96 h - Species: Oryzias latipes)

Citronellyl acetate (mixed Isomers) (150-84-5)	
LC50 - Fish [1]	6.1 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static])

Eugenol (97-53-0)	
LC50 - Fish [1]	13 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static])

Heliotropine crystals (120-57-0)	
LC50 - Fish [1]	2.5 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [static])

d-Limonene (5989-27-5)	
LC50 - Fish [1]	0.619 – 0.796 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 - Fish [2]	35 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)

Veltol plus crystals (4940-11-8)	
LC50 - Fish [1]	> 85 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)

12.2. Persistence and degradability

NASHI PEAR & HONEY FO-0100	
Persistence and degradability	May cause long-term adverse effects in the environment. Not established.

12.3. Bioaccumulative potential

NASHI PEAR & HONEY FO-0100	
Bioaccumulative potential	Not established.

Diphenyl oxide (101-84-8)	
BCF - Fish [1]	470
Partition coefficient n-octanol/water (Log Pow)	4.2

Butylated hydroxytoluene (BHT) crystals (128-37-0)	
BCF - Fish [1]	230 – 2500
Partition coefficient n-octanol/water (Log Pow)	4.17

Isobutyl acetate (110-19-0)	
BCF - Fish [1]	(no significant bioconcentration)
Partition coefficient n-octanol/water (Log Pow)	1.72

Cinnamic aldehyde (104-55-2)	
Partition coefficient n-octanol/water (Log Pow)	2.22 (at 18 °C)

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

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal : Dispose in a safe manner in accordance with local/national regulations. Dispose of
recommendations contents/container in accordance with local/national laws and regulations.
Additional information : Handle empty containers with care because residual vapours are flammable.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

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

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) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport document description (ADR) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (d-Limonene), 9, III, (-)
Transport document description (IMDG) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (d-Limonene), 9, III, MARINE POLLUTANT
Transport document description (IATA) : UN 3082 Environmentally hazardous substance, liquid, n.o.s. (d-Limonene), 9, III
Transport document description (ADN) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (d-Limonene), 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) (ADR) : 9
Danger labels (ADR) : 9



IMDG

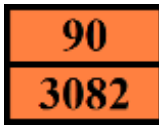
Transport hazard class(es) (IMDG) : 9
Danger labels (IMDG) : 9

	:		
IATA			
Transport hazard class(es) (IATA)	:	9	
Danger labels (IATA)	:	9	
	:		
ADN			
Transport hazard class(es) (ADN)	:	9	
Danger labels (ADN)	:	9	
	:		
RID			
Transport hazard class(es) (RID)	:	9	
Danger labels (RID)	:	9	
	:		
14.4. Packing group			
Packing group (ADR)	:	III	
Packing group (IMDG)	:	III	
Packing group (IATA)	:	III	
Packing group (ADN)	:	III	
Packing group (RID)	:	III	
14.5. Environmental hazards			
Dangerous for the environment	:	Yes	
Marine pollutant	:	Yes	
Other information	:	No supplementary information available	
14.6. Special precautions for user			
Overland transport			
Classification code (ADR)	:	M6	
Special provisions (ADR)	:	274, 335, 375, 601	
Limited quantities (ADR)	:	5I	
Excepted quantities (ADR)	:	E1	
Packing instructions (ADR)	:	P001, IBC03, LP01, R001	
Special packing provisions (ADR)	:	PP1	
Mixed packing provisions (ADR)	:	MP19	
Portable tank and bulk container instructions (ADR)	:	T4	
Portable tank and bulk container special provisions (ADR)	:	TP1, TP29	
Tank code (ADR)	:	LGBV	
Vehicle for tank carriage	:	AT	
Transport category (ADR)	:	3	
Special provisions for carriage - Packages (ADR)	:	V12	

Special provisions for carriage - Loading, unloading and handling (ADR) : CV13

Hazard identification number (Kemler No.) : 90

Orange plates :



Tunnel restriction code (ADR) : -

EAC code : •3Z

Transport by sea

Special provisions (IMDG) : 274, 335, 969

Limited quantities (IMDG) : 5 L

Excepted quantities (IMDG) : E1

Packing instructions (IMDG) : LP01, P001

Special packing provisions (IMDG) : PP1

IBC packing instructions (IMDG) : IBC03

Tank instructions (IMDG) : T4

Tank special provisions (IMDG) : 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 provisions (IATA) : A97, A158, A197

ERG code (IATA) : 9L

Inland waterway transport

Classification code (ADN) : M6

Special provisions (ADN) : 274, 335, 375, 601

Limited quantities (ADN) : 5 L

Excepted quantities (ADN) : E1

Carriage permitted (ADN) : T

Equipment required (ADN) : PP

Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : M6

Special provisions (RID) : 274, 335, 375, 601

Limited quantities (RID) : 5L

Excepted quantities (RID) : E1

Packing instructions (RID) : P001, IBC03, LP01, R001

Special packing provisions (RID) : PP1

Mixed packing provisions (RID) : MP19

Portable tank and bulk container instructions (RID) : T4

Portable tank and bulk container special provisions (RID) : TP1, TP29

Tank codes for RID tanks (RID) : LGBV

Transport category (RID) : 3

Special provisions for carriage – Packages (RID) : W12

Special provisions for carriage - Loading, unloading and handling (RID) : CW13, CW31

Colis express (express parcels) (RID) : CE8

Hazard identification number (RID) : 90

14.7. 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 on
3(a)	Isobutyl acetate ; Isoamyl acetate ; d-Limonene
3(b)	NASHI PEAR & HONEY FO-0100; Isobutyl acetate ; Citronellyl acetate (mixed Isomers) ; Hexyl cinnamic aldehyde ; Cinnamic aldehyde ; Neryl acetate ; d-Limonene ; Eugenol ; Geranyl acetate ; Triplal (Vertocitral) ; Hydroxy
3(c)	NASHI PEAR & HONEY FO-0100 ; Aldehyde C-14 ; Citronellyl acetate (mixed Isomers) ; Hexyl cinnamic aldehyde ; Ethylene brassylate ; d-Limonene ; Geranyl acetate ; Verdox ; Triplal (Vertocitral)
40.	Isobutyl acetate ; Isoamyl acetate ; d-Limonene

Contains no substance on the REACH candidate list

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 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, Significantly hazardous to water (Classification according to AwSV, Annex 1)
Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)
List of sensitizing substances (TRGS 907) : Contains sensitizing substances according TRGS 907

Netherlands

SZW-lijst van kankerverwekkende stoffen : Triplal (Vertocitral) is listed
SZW-lijst van mutagene stoffen : Triplal (Vertocitral) is listed
NIET-limitatieve lijst van voor de voortplanting : None of the components are listed
giftige stoffen – Borstvoeding
NIET-limitatieve lijst van voor de voortplanting : None of the components are listed
giftige stoffen – Vruchtbaarheid
NIET-limitatieve lijst van voor de voortplanting : None of the components are listed
giftige stoffen – Ontwikkeling

Denmark

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

Switzerland

Storage class (LK) : LK 10/12 - Liquids

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. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3

Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
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
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H336	May cause drowsiness or dizziness.
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.

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.