## Safety Data Sheet

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

Issue date: 8/19/2024



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

### 1.1. Product identifier

Product form : Mixture

Product name : BITTER LEMON CC-16419 5% in DPG

Product code : CC-16419\_5% Type of product : Perfumes, Fragrances

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

#### 1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial

For professional use only

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

Candle Craft Weiherwiese 10 65510 Idstein - Germany T 49-6126-9363 -0

info@candlecraft.de - www.candlecraft.de

### 1.4. Emergency telephone number

No additional information available

## **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

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

Hazardous to the aquatic environment - Chronic Hazard H412

Category 3

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

#### Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

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

Signal word (CLP)

Hazard statements (CLP) : H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P273 - Avoid release to the environment.

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

: EUH208 - Contains Hexyl cinnamic aldehyde, citral, Citrus medica limonum (Lemon) peel

oil, Triplal (Vertocitral). May produce an allergic reaction.

Extra phrases Restricted to professional users.

## 2.3. Other hazards

**EUH** phrases

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 %

## Safety Data Sheet

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

## **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	1.5 – 3	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Diphenyl oxide 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); substance with a Community workplace exposure limit	CAS-No.: 101-84-8 EC-No.: 202-981-2 REACH-no: 01-2119472545- 33	0.065 – 0.125	Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Hexyl cinnamic aldehyde	CAS-No.: 101-86-0 EC-No.: 202-983-3 REACH-no: 01-2119533092- 50	0.065 – 0.125	Skin Sens. 1, H317 Aquatic Chronic 2, H411
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	0.065 - 0.125	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
Citrus medica limonum (Lemon) peel oil	CAS-No.: 8008-56-8 EC-No.: 284-515-8	0.065 – 0.125	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Repr. 2, H361 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Triplal (Vertocitral)	CAS-No.: 68039-49-6 EC-No.: 268-264-1	0.065 – 0.125	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412

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 : 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.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

### 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.

8/19/2024 (Issue date) EN (English US) 2/16

## Safety Data Sheet

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

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

No additional information available

## **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

## 5.2. Special hazards arising from the substance or mixture

No additional information available

## 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 environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

## **SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

## 6.2. Environmental precautions

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

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

Collect spillage. Store away from other materials.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

Precautions for safe handling : 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  $% \left( 1\right) =\left( 1\right) \left( 1\right$ 

formation of vapor.

### 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.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

Germany

Storage class (LGK, TRGS 510) : LGK 12 - Non-combustible liquids

8/19/2024 (Issue date) EN (English US) 3/16

## Safety Data Sheet

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

Joint storage table : IGK 1 IGK 2A IG

LGK 2A LGK 2B LGK 3 LGK 4.1A LGK 1 LGK 4.1B LGK 4.2 LGK 4.3 LGK 5.1A LGK 5.1B LGK 6.1A LGK 6.1B LGK 5.1C LGK 5.2 LGK 6.1C LGK 6.1D LGK 6.2 LGK 7 LGK 8A LGK 8B LGK 11 LGK 12 LGK 10 LGK 13 LGK 10-13

Joint storage not permitted for : LGK 1, LGK 6.2, LGK 7

Joint storage with restrictions permitted for : LGK 4.1A, LGK 4.3, LGK 5.1C

Joint storage permitted for : LGK 2A, LGK 2B, LGK 3, LGK 4.1B, LGK 4.2, LGK 5.1A, LGK 5.1B, LGK 5.2, LGK 6.1A,

LGK 6.1B, LGK 6.1C, LGK 6.1D, LGK 8A, LGK 8B, LGK 10, LGK 11, LGK 12, LGK 13, LGK

10-13

**Switzerland** 

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

## 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/m³	
	1 ppm	
IOEL STEL	14 mg/m³	
	2 ppm	
Austria - Occupational Exposure Limits		
MAK (OEL TWA)	7 mg/m³	
	1 ppm	
MAK (OEL STEL)	14 mg/m³	
	2 ppm	
Belgium - Occupational Exposure Limits		
OEL TWA	7 mg/m³ (vapor)	
	1 ppm (vapor)	
OEL STEL	14 mg/m³ (vapor)	
	2 ppm (vapor)	
Bulgaria - Occupational Exposure Limits		
OEL TWA	7 mg/m³	
	1 ppm	
OEL STEL	14 mg/m³	
	2 ppm	
Croatia - Occupational Exposure Limits		
GVI (OEL TWA)	7 mg/m³	

# Safety Data Sheet

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

Diphenyl oxide (101-84-8)		
	1 ppm	
KGVI (OEL STEL)	14 mg/m³	
	2 ppm	
Cyprus - Occupational Exposure Limits		
OEL TWA	7 mg/m³	
	1 ppm	
OEL STEL	14 mg/m³	
	2 ppm	
Czech Republic - Occupational Exposure Limits		
PEL (OEL TWA)	5 mg/m³	
Denmark - Occupational Exposure Limits		
OEL TWA	7 mg/m³	
	1 ppm	
OEL STEL	14 mg/m³	
	2 ppm	
Estonia - Occupational Exposure Limits		
OEL TWA	7 mg/m³	
	1 ppm	
OEL STEL	14 mg/m³	
	2 ppm	
Finland - Occupational Exposure Limits		
HTP (OEL TWA)	7 mg/m³	
	1 ppm	
HTP (OEL STEL)	14 mg/m³	
	2 ppm	
France - Occupational Exposure Limits		
VME (OEL TWA)	7 mg/m³ (indicative limit)	
	1 ppm (indicative limit)	
VLE (OEL C/STEL)	14 mg/m³ (indicative limit)	
	2 ppm (indicative limit)	
Germany - Occupational Exposure Limits (TRGS 9	900)	
AGW (OEL TWA)	7.1 mg/m³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed-vapor)	
	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/m³	
	1 ppm	
OEL STEL	14 mg/m³	
	200 ppm	

# Safety Data Sheet

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

Diphenyl oxide (101-84-8)	
Greece - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	1 ppm
OEL STEL	14 mg/m³
	2 ppm
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	7 mg/m³
CK (OEL STEL)	14 mg/m³
Ireland - Occupational Exposure Limits	
OEL TWA	7 mg/m³ (vapour)
	1 ppm (vapour)
OEL STEL	14 mg/m³ (vapour)
	2 ppm (vapour)
Italy - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	1 ppm
Latvia - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	1 ppm
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	7 mg/m³
	1 ppm
TPRV (OEL STEL)	14 mg/m³
	2 ppm
Luxembourg - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	1 ppm
OEL STEL	14 mg/m³
	2 ppm
Malta - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	1 ppm
OEL STEL	14 mg/m³
	2 ppm
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	7 mg/m³
	1 ppm
TGG-15min (OEL STEL)	14 mg/m³
·	2 ppm

# Safety Data Sheet

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

	Diphenyl oxide (101-84-8)	
Poland - Occupational Exposure Limits		
NDS (OEL TWA)	7 mg/m³	
NDSCh (OEL STEL)	14 mg/m³	
Portugal - Occupational Exposure Limits		
OEL TWA	7 mg/m³	
	1 ppm (vapor)	
OEL STEL	14 mg/m³ (indicative limit value)	
	2 ppm (indicative limit value-vapor)	
Romania - Occupational Exposure Limits		
OEL TWA	7 mg/m³	
	1 ppm	
OEL STEL	14 mg/m³	
	2 ppm	
Slovakia - Occupational Exposure Limits		
NPHV (OEL TWA)	7 mg/m³	
	1 ppm	
NPHV (OEL C)	7.1 mg/m³	
Slovenia - Occupational Exposure Limits		
OEL TWA	7 mg/m³	
	1 ppm	
OEL STEL	14 mg/m³	
	2 ppm	
Spain - Occupational Exposure Limits		
VLA-ED (OEL TWA)	7.1 mg/m³ (vapor)	
	1 ppm (vapor)	
VLA-EC (OEL STEL)	14.2 mg/m³ (vapor)	
	2 ppm (vapor)	
Sweden - Occupational Exposure Limits		
NGV (OEL TWA)	7 mg/m³	
	1 ppm	
KGV (OEL STEL)	14 mg/m³	
	2 ppm	
United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA)	7 mg/m³	
	1 ppm	
WEL STEL (OEL STEL)	14 mg/m³	
	2 ppm	
Norway - Occupational Exposure Limits		
Grenseverdi (OEL TWA)	7 mg/m³	

# Safety Data Sheet

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

Diphenyl oxide (101-84-8)			
	1 ppm		
Korttidsverdi (OEL STEL)	14 mg/m³ (value from the regulation)		
	2 ppm (value from the regulation)		
Switzerland - Occupational Exposure Limits			
MAK (OEL TWA)	7 mg/m³ (aerosol, vapour)		
	1 ppm (aerosol, vapour)		
KZGW (OEL STEL)	14 mg/m³ (aerosol, vapour)		
	2 ppm (aerosol, vapour)		
OEL chemical category	Category 2 reproductive toxin		
USA - ACGIH - Occupational Exposure Limits			
ACGIH OEL TWA	1 ppm (vapor)		
ACGIH OEL STEL	2 ppm (vapor fraction)		
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	Ireland - Occupational Exposure Limits		
OEL TWA	5 ppm		
OEL STEL	15 ppm (calculated)		
Poland - Occupational Exposure Limits			
NDS (OEL TWA)	27 mg/m³		
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		

### 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

## Safety Data Sheet

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

### 8.1.5. Control banding

No additional information available

### 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

No additional information available

### 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

### 8.2.2.2. Skin protection

#### 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

### Other information:

Relative density

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

Color : Conforms to standard.

: characteristic. Odor Odor threshold : Not available Melting point : Not available Freezing point : Not available Boiling point : Not available Flammability : Non flammable. Lower explosion limit : Not available Upper explosion limit : Not available Flash point : > 93 °C Auto-ignition temperature : Not available : Not available Decomposition temperature : Not available рΗ : Not available Viscosity, kinematic Solubility : Not available : Not available Partition coefficient n-octanol/water (Log Kow) : Not available Vapor pressure Vapor pressure at 50°C : Not available Density : Not available

8/19/2024 (Issue date) EN (English US) 9/16

: Not available

## Safety Data Sheet

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

Relative vapor 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

No additional information available

## **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

No additional information available

## 10.2. Chemical stability

Not established.

## 10.3. Possibility of hazardous reactions

Not established.

## 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong acids. Strong bases.

## 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

## **SECTION 11: Toxicological information**

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

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

Diphenyl oxide (101-84-8)		
LD50 oral rat	2450 mg/kg (Source: NLM_CIP)	
LD50 oral	2830 mg/kg body weight	
LD50 dermal rabbit	> 7940 mg/kg (Source: NLM_CIP)	
LC50 Inhalation - Rat (Dust/Mist)	1.5 mg/l/4h	
Hexyl cinnamic aldehyde (101-86-0)		
LD50 oral rat	3100 mg/kg (Source: NLM_CIP)	
LD50 oral	3100 mg/kg body weight	
LD50 dermal rabbit	> 3000 mg/kg (Source: EPA_HPV)	
LC50 Inhalation - Rat	> 5 mg/l/4h	
citral (5392-40-5)		
LD50 oral rat	4960 mg/kg (Source: NLM_CIP)	

# Safety Data Sheet

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

citral (5392-40-5)		
LD50 dermal rabbit	2250 mg/kg (Source: NLM_CIP)	
Citrus medica limonum (Lemon) peel oil (8008-56-8)		
LD50 oral rat	2840 mg/kg (Source: NLM_CIP)	
Triplal (Vertocitral) (68039-49-6)		
LD50 oral	2330 mg/kg	
benzyl benzoate (120-51-4)		
LD50 oral rat	500 mg/kg (Source: NLM_CIP)	
LD50 oral	1160 mg/kg body weight	
LD50 dermal rabbit	4000 mg/kg (Source: NLM_CIP)	
Skin corrosion/irritation Additional information Serious eye damage/irritation Additional information Respiratory or skin sensitization Additional information Germ cell mutagenicity Additional information Carcinogenicity Additional information Reproductive toxicity Additional information STOT-single exposure Additional information STOT-repeated exposure Additional information Aspiration hazard Additional information	Not classified Based on available data, the classification criteria are not met Not classified Based on available data, the classification criteria are not met Not classified Based on available data, the classification criteria are not met Not classified Based on available data, the classification criteria are not met Not classified Based on available data, the classification criteria are not met Not classified Based on available data, the classification criteria are not met Not classified Based on available data, the classification criteria are not met Not classified Based on available data, the classification criteria are not met Not classified Based on available data, the classification criteria are not met Not classified Based on available data, the classification criteria are not met Not classified Based on available data, the classification criteria are not met	
benzyl benzoate (120-51-4)		
Viscosity, kinematic	7.456 mm²/s	

## 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

Hazardous to the aquatic environment, short-term

acute)

: Not classified

 $\label{thm:long-term} \mbox{Hazardous to the aquatic environment, long-term}$ 

: Harmful to aquatic life with long lasting effects.

(chronic)

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)

# Safety Data Sheet

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

citral (5392-40-5)	
EC50 96h - Algae [1]	19 mg/l (Species: Desmodesmus subspicatus)
benzyl benzoate (120-51-4)	
LC50 - Fish [1]	2.32 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static] Source: ECHA)
NOEC (chronic)	0.168 mg/l

## 12.2. Persistence and degradability

BITTER LEMON CC-16419 5% in DPG		
Persistence and degradability	Not established.	
Diphenyl oxide (101-84-8)		
Persistence and degradability	Rapidly degradable	
Hexyl cinnamic aldehyde (101-86-0)		
Persistence and degradability	Rapidly degradable	
citral (5392-40-5)		
Persistence and degradability	Rapidly degradable	
Citrus medica limonum (Lemon) peel oil (8008-56-8)		
Persistence and degradability	Rapidly degradable	
Triplal (Vertocitral) (68039-49-6)		
Persistence and degradability	Rapidly degradable	
benzyl benzoate (120-51-4)		
Persistence and degradability	May cause long-term adverse effects in the environment.	

## 12.3. Bioaccumulative potential

BITTER LEMON CC-16419 5% in DPG		
Bioaccumulative potential	Not established.	
Diphenyl oxide (101-84-8)		
BCF - Fish [1]	(470 dimensionless)	
Partition coefficient n-octanol/water (Log Pow)	4.21 (at 25 °C)	
citral (5392-40-5)		
Partition coefficient n-octanol/water (Log Pow)	2.76 (at 25 °C)	
benzyl benzoate (120-51-4)		
Partition coefficient n-octanol/water (Log Pow)	3.97 (at 25 °C)	
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

## Safety Data Sheet

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

## 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

Product/Packaging disposal recommendations

**Ecological information** 

HP code

: Dispose in a safe manner in accordance with local/national regulations.

: Avoid release to the environment.

: HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one

or more sectors of the environment

## **SECTION 14: Transport information**

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping	g name			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard o	class(es)			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

## 14.6. Special precautions for user

### **Overland transport**

Not applicable

### Transport by sea

Not applicable

### Air transport

Not applicable

### **Inland waterway transport**

Not applicable

### Rail transport

Not applicable

## 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## Safety Data Sheet

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

### **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(c)	BITTER LEMON CC- 16419 5% in DPG; Hexyl cinnamic aldehyde; Citrus medica limonum (Lemon) peel oil; Triplal (Vertocitral); benzyl benzoate	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		
3(b)	Hexyl cinnamic aldehyde; citral; Citrus medica limonum (Lemon) peel oil; Triplal (Vertocitral); benzyl benzoate	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(a)	Citrus medica limonum (Lemon) peel oil	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		
40.	Citrus medica limonum (Lemon) peel oil	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.		

### **REACH Annex XIV (Authorisation List)**

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

## **REACH Candidate List (SVHC)**

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

#### **PIC Regulation (Prior Informed Consent)**

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

## **POP Regulation (Persistent Organic Pollutants)**

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

### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

## **Dual-Use Regulation (428/2009)**

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

### **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)

## **Drug Precursors Regulation (273/2004)**

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

## 15.1.2. National regulations

### Germany

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

# Safety Data Sheet

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

Hazardous Incident Ordinance (12. BImSchV) : Is not subject to the Hazardous Incident 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 SZW-lijst van reprotoxische stoffen – Borstvoeding

SZW-lijst van reprotoxische stoffen –

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – Ontwikkeling

None of the components are listedNone of the components are listed

None of the components are listedNone of the components are listed

: Lemon oil ,Triplal (Vertocitral) are listed

: Lemon oil ,Triplal (Vertocitral) are listed

OZVV iijot vari reprotoxioone stonen — Ontwikkeiii

Denmark

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

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## **SECTION 16: Other information**

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE

COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and

amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-phrases:			
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		
EUH208	Contains Hexyl cinnamic aldehyde, citral, Citrus medica limonum (Lemon) peel oil, Triplal (Vertocitral). May produce an allergic reaction.		
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2		
Flam. Liq. 3	Flammable liquids Category 3		
H226	Flammable liquid and vapor.		
H302	Harmful if swallowed.		
H315	Causes skin irritation.		
H317	May cause an allergic skin reaction.		
H319	Causes serious eye irritation.		
H361	Suspected of damaging fertility or the unborn child.		
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 sensitization, Category 1		

# Safety Data Sheet

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

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

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