



# OIL, TUBEROSE\*

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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Version: 1.5

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : OIL, TUBEROSE\*  
CAS-No. : N/A  
Product code : 90-2718-02

#### 1.2. Recommended use and restrictions on use

#### 1.3. Supplier

The Lebermuth Company  
4004 Technology Drive  
South Bend, IN 46628 - United States  
T 574-259-7000 - F 574-258-7450  
[info@lebermuth.com](mailto:info@lebermuth.com) - [www.lebermuth.com](http://www.lebermuth.com)

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC - USA: 800-424-9300 International: +1 703-527-3887 / 1-800-424-9300  
CCN 13010

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Skin corrosion/irritation Category 2	Causes skin irritation
Serious eye damage/eye irritation Category 1	Causes serious eye damage
Skin sensitization, Category 1	May cause an allergic skin reaction
Reproductive toxicity Category 2	Suspected of damaging fertility or the unborn child

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

Causes skin irritation  
May cause an allergic skin reaction  
Causes serious eye damage  
Suspected of damaging fertility or the unborn child

Precautionary statements (GHS US) :

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Avoid breathing dust/fume/gas/mist/vapors/spray.  
Wash hands, forearms and face thoroughly after handling.  
Contaminated work clothing must not be allowed out of the workplace.  
Wear protective gloves/protective clothing/eye protection/face protection.  
If on skin: Wash with plenty of water.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If exposed or concerned: Get medical advice/attention.  
Immediately call a poison center or doctor.  
Specific treatment (see supplemental first aid instruction on this label).  
If skin irritation occurs: Get medical advice/attention.  
If skin irritation or rash occurs: Get medical advice/attention.  
Take off contaminated clothing and wash it before reuse.  
Wash contaminated clothing before reuse.  
Store locked up.  
Dispose of contents/container to hazardous or special waste collection point, in accordance

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

### 2.3. Other hazards which do not result in classification

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
BENZYL BENZOATE	(CAS-No.) 120-51-4	10 – 25	Acute Tox. 4 (Oral), H302
DIETHYL PHTHALATE	(CAS-No.) 84-66-2	10 – 25	Acute Tox. 4 (Inhalation:dust,mist), H332
AMYL CINNAMAL	(CAS-No.) 122-40-7	10 – 25	Skin Sens. 1B, H317
BENZYL SALICYLATE	(CAS-No.) 118-58-1	5 – 10	Eye Irrit. 2, H319 Skin Sens. 1B, H317
LINALOOL	(CAS-No.) 78-70-6	1 – 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1B, H317
LINALYL ACETATE	(CAS-No.) 115-95-7	1 – 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Skin Sens. 1B, H317
ALPHA TERPINEOL	(CAS-No.) 98-55-5	1 – 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
GERANIOL	(CAS-No.) 106-24-1	1 – 5	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317
PHENYLETHYL ALCOHOL	(CAS-No.) 60-12-8	1 – 5	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319
METHYL ANTHRANILATE	(CAS-No.) 134-20-3	1 – 5	Eye Irrit. 2A, H319
D-LIMONENE	(CAS-No.) 5989-27-5	1 – 5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304
EUGENOL	(CAS-No.) 97-53-0	1 – 5	Eye Irrit. 2A, H319 Skin Sens. 1B, H317
DL-CITRONELLOL	(CAS-No.) 106-22-9	1 – 5	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1B, H317
7-acetyl-1,1,3,4,4,6-hexamethyltetralin	(CAS-No.) 1506-02-1	1 – 5	Acute Tox. 4 (Oral), H302
p-Methylanisole	(CAS-No.) 104-93-8	0.1 – 1	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Inhalation:vapour), H331 Skin Irrit. 2, H315 Repr. 2, H361

Full text of hazard classes and H-statements : 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.
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 to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.

### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation	: Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
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Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: None under normal conditions.

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

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

### 5.2. Specific hazards arising from the chemical

Fire hazard	: No fire hazard.
Explosion hazard	: No direct explosion hazard.
Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.

### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
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

General measures	: Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.
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#### 6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes. 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".
Emergency procedures	: Evacuate unnecessary personnel. Stop leak if safe to do so.

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

For containment	: Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information	: 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

Additional hazards when processed	: Not expected to present a significant hazard under anticipated conditions of normal use.
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. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.
Hygiene measures	: Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Keep in a cool, well-ventilated place away from heat.
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Storage conditions : Store locked up.  
Packaging materials : Store always product in container of same material as original container.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

<b>OIL, TUBEROSE* (N/A)</b>	
No additional information available	
<b>7-acetyl-1,1,3,4,4,6-hexamethyltetralin (1506-02-1)</b>	
No additional information available	
<b>BENZYL BENZOATE (120-51-4)</b>	
No additional information available	
<b>DIETHYL PHTHALATE (84-66-2)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Diethyl phthalate
ACGIH OEL TWA	5 mg/m <sup>3</sup>
Remark (ACGIH)	URT irr
<b>GERANIOL (106-24-1)</b>	
No additional information available	
<b>p-Methylanisole (104-93-8)</b>	
No additional information available	
<b>BENZYL SALICYLATE (118-58-1)</b>	
No additional information available	
<b>LINALOOL (78-70-6)</b>	
No additional information available	
<b>EUGENOL (97-53-0)</b>	
No additional information available	
<b>D-LIMONENE (5989-27-5)</b>	
No additional information available	
<b>ALPHA TERPINEOL (98-55-5)</b>	
No additional information available	
<b>AMYL CINNAMAL (122-40-7)</b>	
No additional information available	
<b>DL-CITRONELLOL (106-22-9)</b>	
No additional information available	
<b>LINALYL ACETATE (115-95-7)</b>	
No additional information available	
<b>METHYL ANTHRANILATE (134-20-3)</b>	
No additional information available	
<b>PHENYLETHYL ALCOHOL (60-12-8)</b>	
No additional information available	

#### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.  
Environmental exposure controls : Avoid release to the environment.

#### 8.3. Individual protection measures/Personal protective equipment

##### Personal protective equipment:

Wear recommended personal protective equipment.

##### Hand protection:

Protective gloves

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### Eye protection:

Safety glasses

### Skin and body protection:

Wear suitable protective clothing

### Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: PALE YELLOW TO YELLOW
Odor	: CHARACTERISTIC, MATCHING THE RETAINER SAMPLE.
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 96 °C
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: 1.029 (1.019 – 1.039)
Solubility	: Insoluble.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

Refractive index	: 1.522 (1.512 – 1.532)
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## 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).

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### 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) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

<b>7-acetyl-1,1,3,4,4,6-hexamethyltetralin (1506-02-1)</b>	
ATE US (oral)	1000 mg/kg body weight
<b>BENZYL BENZOATE (120-51-4)</b>	
LD50 oral rat	> 2000 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 2000 mg/kg bw/day (Modification of Draize 1959 method, 4 h, Rabbit, Experimental value, Dermal)
ATE US (oral)	1160 mg/kg body weight
<b>DIETHYL PHTHALATE (84-66-2)</b>	
LD50 oral rat	> 5991 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 11181 mg/kg body weight (24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 4.64 mg/l (6 h, Rat, Experimental value, Inhalation, 14 day(s))
<b>GERANIOL (106-24-1)</b>	
ATE US (oral)	3600 mg/kg body weight
<b>p-Methylanisole (104-93-8)</b>	
LD50 oral rat	1920 mg/kg (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 4850 mg/kg (Equivalent or similar to OECD 403, 24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 6.1 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation, 14 day(s))
ATE US (oral)	1900 mg/kg body weight
ATE US (vapors)	3 mg/l/4h
<b>BENZYL SALICYLATE (118-58-1)</b>	
ATE US (oral)	2200 mg/kg body weight
<b>LINALOOL (78-70-6)</b>	
ATE US (oral)	2790 mg/kg body weight
<b>D-LIMONENE (5989-27-5)</b>	
LD50 oral rat	> 2000 mg/kg body weight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 5000 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Read-across, Dermal, 7 day(s))
<b>ALPHA TERPINEOL (98-55-5)</b>	
LD50 oral rat	4300 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 2900 - 5700
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
ATE US (oral)	4300 mg/kg body weight
<b>AMYL CINNAMAL (122-40-7)</b>	
ATE US (oral)	3730 mg/kg body weight
<b>DL-CITRONELLOL (106-22-9)</b>	
LD50 oral rat	3450 mg/kg (Rat, Inconclusive, insufficient data, Oral)
LD50 dermal rabbit	2650 mg/kg (Rabbit, Inconclusive, insufficient data, Dermal)

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<b>DL-CITRONELLOL (106-22-9)</b>	
ATE US (oral)	3450 mg/kg body weight
ATE US (dermal)	2650 mg/kg body weight

<b>METHYL ANTHRANILATE (134-20-3)</b>	
ATE US (oral)	2780 mg/kg body weight

<b>PHENYLETHYL ALCOHOL (60-12-8)</b>	
LD50 oral rat	1603 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	2535 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 4.63 mg/l (4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s))
ATE US (oral)	500 mg/kg body weight

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

<b>EUGENOL (97-53-0)</b>	
IARC group	3 - Not classifiable

Reproductive toxicity : Suspected of damaging fertility or the unborn child.

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

<b>ALPHA TERPINEOL (98-55-5)</b>	
NOAEL (oral,rat,90 days)	≥ 314 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)

Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after inhalation	: Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: None under normal conditions.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

<b>BENZYL BENZOATE (120-51-4)</b>	
LC50 - Fish [1]	2.32 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP)

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<b>BENZYL BENZOATE (120-51-4)</b>	
EC50 - Crustacea [1]	3.09 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
<b>DIETHYL PHTHALATE (84-66-2)</b>	
LC50 - Fish [1]	12 mg/l (EPA 660/3 - 75/009, 96 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value)
ErC50 algae	45 mg/l (Equivalent or similar to OECD 201, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)
<b>p-Methylanisole (104-93-8)</b>	
LC50 - Fish [1]	68.2 mg/l (DIN 38412-15, 96 h, Leuciscus idus, Static system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	27 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Flow-through system, Fresh water, Experimental value)
<b>D-LIMONENE (5989-27-5)</b>	
LC50 - Fish [1]	720 µg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
EC50 - Crustacea [1]	0.307 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Semi-static system, Fresh water, Experimental value, GLP)
LC50 - Fish [2]	702 µg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [2]	0.51 mg/l Test organisms (species): Daphnia magna
<b>ALPHA TERPINEOL (98-55-5)</b>	
LC50 - Fish [1]	70 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	73 mg/l Test organisms (species): Daphnia magna
<b>DL-CITRONELLOL (106-22-9)</b>	
LC50 - Fish [1]	14.66 mg/l (DIN 38412-15, 96 h, Leuciscus idus, Static system, Fresh water, Experimental value)
EC50 - Crustacea [1]	17.48 mg/l (48 h, Daphnia magna, Static system, Fresh water, Experimental value)
<b>PHENYLETHYL ALCOHOL (60-12-8)</b>	
LC50 - Fish [1]	215 – 464 mg/l (DIN 38412: German standard methods for the examination of water, waste water and sludge, 96 h, Leuciscus idus, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	287.17 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 algae	1300 mg/l (DIN 38412: German standard methods for the examination of water, waste water and sludge, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)

### 12.2. Persistence and degradability

<b>BENZYL BENZOATE (120-51-4)</b>	
Persistence and degradability	Readily biodegradable in water.
<b>DIETHYL PHTHALATE (84-66-2)</b>	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
<b>p-Methylanisole (104-93-8)</b>	
Persistence and degradability	Readily biodegradable in water.
<b>D-LIMONENE (5989-27-5)</b>	
Persistence and degradability	Readily biodegradable in water.
ThOD	3.29 g O <sub>2</sub> /g substance
<b>DL-CITRONELLOL (106-22-9)</b>	
Persistence and degradability	Readily biodegradable in water.
Chemical oxygen demand (COD)	2.05 g O <sub>2</sub> /g substance
ThOD	2.961 g O <sub>2</sub> /g substance
<b>PHENYLETHYL ALCOHOL (60-12-8)</b>	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.



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<b>PHENYLETHYL ALCOHOL (60-12-8)</b>	
Biochemical oxygen demand (BOD)	1.45 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	2.5 g O <sub>2</sub> /g substance
ThOD	2.6 g O <sub>2</sub> /g substance

### 12.3. Bioaccumulative potential

<b>BENZYL BENZOATE (120-51-4)</b>	
BCF - Fish [1]	193.4 l/kg (BCFBAF v3.01, Pisces, Calculated value)
Partition coefficient n-octanol/water (Log Pow)	3.97 (Experimental value, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

<b>DIETHYL PHTHALATE (84-66-2)</b>	
Partition coefficient n-octanol/water (Log Pow)	2.2 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 40 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

<b>p-Methylanisole (104-93-8)</b>	
Partition coefficient n-octanol/water (Log Pow)	2.8 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 35 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

<b>D-LIMONENE (5989-27-5)</b>	
BCF - Fish [1]	864.8 l/kg (BCFBAF v3.01, Pisces, QSAR, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	4.38 (Experimental value, Equivalent or similar to OECD 117, 37 °C)
Bioaccumulative potential	Potential for bioaccumulation (4 ≤ Log Kow ≤ 5).

<b>DL-CITRONELLOL (106-22-9)</b>	
BCF - Fish [1]	82.59 l/kg (BCFBAF v3.00, Estimated value)
Partition coefficient n-octanol/water (Log Pow)	3.41 (Practical experience/observation, EU Method A.8: Partition Coefficient, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

<b>PHENYLETHYL ALCOHOL (60-12-8)</b>	
Partition coefficient n-octanol/water (Log Pow)	1.3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

### 12.4. Mobility in soil

<b>BENZYL BENZOATE (120-51-4)</b>	
Surface tension	27 mN/m (210 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.8 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
Ecology - soil	Low potential for mobility in soil.

<b>DIETHYL PHTHALATE (84-66-2)</b>	
Surface tension	37.5 mN/m (20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.34 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
Ecology - soil	Low potential for adsorption in soil.

<b>p-Methylanisole (104-93-8)</b>	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.6 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)
Ecology - soil	Low potential for adsorption in soil.

<b>D-LIMONENE (5989-27-5)</b>	
Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.049 – 3.801 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Low potential for mobility in soil.

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DL-CITRONELLOL (106-22-9)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.85 (log Koc, EPIWIN 2.00, Estimated value)
Ecology - soil	Highly mobile in soil.

PHENYLETHYL ALCOHOL (60-12-8)	
Surface tension	59.7 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.5 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)
Ecology - soil	Highly mobile in soil.

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Not regulated

### Transportation of Dangerous Goods

Not regulated

### Transport by sea

Not regulated

### Air transport

Not regulated

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### 7-acetyl-1,1,3,4,4,6-hexamethyltetralin (1506-02-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### BENZYL BENZOATE (120-51-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### DIETHYL PHTHALATE (84-66-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory  
Not subject to reporting requirements of the United States SARA Section 313

CERCLA RQ	1000 lb
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### **p-Methylanisole (104-93-8)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### **ALPHA TERPINEOL (98-55-5)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### **METHYL ANTHRANILATE (134-20-3)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

## 15.2. International regulations

### CANADA

#### **7-acetyl-1,1,3,4,4,6-hexamethyltetralin (1506-02-1)**

Listed on the Canadian DSL (Domestic Substances List)

#### **BENZYL BENZOATE (120-51-4)**

Listed on the Canadian DSL (Domestic Substances List)

#### **DIETHYL PHTHALATE (84-66-2)**

Listed on the Canadian DSL (Domestic Substances List)

#### **p-Methylanisole (104-93-8)**

Listed on the Canadian DSL (Domestic Substances List)

#### **BENZYL SALICYLATE (118-58-1)**

Listed on the Canadian DSL (Domestic Substances List)

#### **LINALOOL (78-70-6)**

Listed on the Canadian DSL (Domestic Substances List)

#### **EUGENOL (97-53-0)**

Listed on the Canadian DSL (Domestic Substances List)

#### **ALPHA TERPINEOL (98-55-5)**

Listed on the Canadian DSL (Domestic Substances List)

#### **AMYL CINNAMAL (122-40-7)**

Listed on the Canadian DSL (Domestic Substances List)

#### **DL-CITRONELLOL (106-22-9)**

Listed on the Canadian DSL (Domestic Substances List)

#### **LINALYL ACETATE (115-95-7)**

Listed on the Canadian DSL (Domestic Substances List)

#### **METHYL ANTHRANILATE (134-20-3)**

Listed on the Canadian DSL (Domestic Substances List)

#### **PHENYLETHYL ALCOHOL (60-12-8)**

Listed on the Canadian DSL (Domestic Substances List)

### EU-Regulations

No additional information available

### National regulations

#### **BENZYL SALICYLATE (118-58-1)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active  
Listed on INSQ (Mexican National Inventory of Chemical Substances)

#### **LINALOOL (78-70-6)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active  
Listed on INSQ (Mexican National Inventory of Chemical Substances)

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### EUGENOL (97-53-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active  
Listed on INSQ (Mexican National Inventory of Chemical Substances)

### AMYL CINNAMAL (122-40-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

### DL-CITRONELLOL (106-22-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active  
Listed on INSQ (Mexican National Inventory of Chemical Substances)

### LINALYL ACETATE (115-95-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active  
Listed on INSQ (Mexican National Inventory of Chemical Substances)

### PHENYLETHYL ALCOHOL (60-12-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active  
Listed on INSQ (Mexican National Inventory of Chemical Substances)

### 15.3. US State regulations

#### WARNING:

This product can expose you to methanol - impurity, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

This product can expose you to beta-myrcene, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Component	State or local regulations
DIETHYL PHTHALATE(84-66-2)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

## SECTION 16: Other information

Revision date : 07/24/2023

Full text of H-phrases:

H226	Flammable liquid and vapor
H227	Combustible liquid
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H320	Causes eye irritation
H331	Toxic if inhaled
H332	Harmful if inhaled
H361	Suspected of damaging fertility or the unborn child

SDS US (GHS HazCom 2012) - Lebermuth

*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.*