

# SAFETY DATA SHEET

## SOIR ESSENCE FRAGRANCE OIL

### 1. PRODUCT INFORMATION AND COMPANY IDENTIFICATION

Product Name: Soir Essence Fragrance Oil

Company: Natural Bulk Supplies, 318 Half Day Rd, # 348,  
Buffalo Grove, IL 60089 Phone: 847-489-7180

Emergency Contact: Infotrac: 800-535-5053(North America) +1-352-323-3500 (International)

### 2. HAZARD IDENTIFICATION

#### Classification of the substance or mixture

#### GHS US classification

Flammable liquids

Category 4

H227 Combustible liquid

Skin corrosion/irritation

Category 2

H315 Causes skin irritation

Serious eye damage/eye

irritation Category 2

H319 Causes serious eye irritation

Skin sensitization,

Category 1

H317 May cause an allergic skin reaction

Reproductive toxicity

Category 2

H361 Suspected of damaging fertility or the unborn child

Full text of H statements : see section 16

#### GHS Label elements, including precautionary statements

**GHS US labeling**

Hazard pictograms (GHS US)



Signal word (GHS US) : Warning

Hazard statements (GHS US) :

H227 - Combustible liquid

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

Precautionary statements (GHS US) :

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 - Wash hands, forearms and face thoroughly after handling.

P272 - Contaminated work clothing must not be allowed out of the workplace.

P280 - Wear protective gloves/protective clothing/eye protection/face 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.

P308+P313 - If exposed or concerned: Get medical advice/attention.

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

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P363 - Wash contaminated clothing before reuse.

P370+P378 - In case of fire: Use media other than water to extinguish.

P403+P235 - Store in a well-ventilated place. Keep cool.

P405 - Store locked up.

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**Other hazards which do not result in classification**

No additional information available

**Unknown acute toxicity (GHS US)**

Not applicable

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substances**

Not applicable

**Mixtures**

Name	Product identifier	%	GHS US classification
BENZYL BENZOATE	(CAS-No.) 120-51-4	30 – 70	Acute Tox. 4 (Oral), H302
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethanone	(CAS-No.) 54464-57-2	5 – 10	Skin Irrit. 2, H315; Skin Sens. 1B, H317
ETHYL VANILLIN	(CAS-No.) 121-32-4	1 – 5	Eye Irrit. 2B, H320
LIMONENE	(CAS-No.) 5989-27-5	1 – 5	Flam. Liq. 3, H226; Skin Irrit. 2, H315; Skin Sens. 1B, H317; Asp. Tox. 1, H304
LINALYL ACETATE	(CAS-No.) 115-95-7	1 – 5	Flam. Liq. 3, H226; Skin Irrit. 2, H315; Eye Irrit. 2B, H320; Skin Sens. 1B, H317
CITRAL	(CAS-No.) 5392-40-5	1 – 5	Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1B, H317
AMYL ALCOHOL	(CAS-No.) 71-41-0	1 – 5	Flam. Liq. 3, H226; Acute Tox. 4 (Inhalation:dust,mist), H332; Skin Irrit. 2, H315; Eye Dam. 1, H318; STOT SE 3, H335
ALLYL CYCLO HEXYL PROPIONATE	(CAS-No.) 2705-87-5	1 – 5	Acute Tox. 4 (Oral), H302; Acute Tox. 4 (Dermal), H312; Skin Sens. 1, H317

ALLYL CAPROATE	(CAS-No.) 123-68-2	1 – 5	Flam. Liq. 4, H227; Acute Tox. 3 (Oral), H301; Acute Tox. 3 (Dermal), H311; Acute Tox. 3 (Inhalation), H331; Skin Sens. 1, H317
COUMARIN	(CAS-No.) 91-64-5	1 – 5	Acute Tox. 3 (Oral), H301; Skin Sens. 1B, H317
p-Mentha-1,4-diene	(CAS-No.) 99-85-4	< 0.5	Flam. Liq. 3, H226; Asp. Tox. 1, H304
GERANIOL	(CAS-No.) 106-24-1	< 0.5	Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1, H317

Full text of hazard classes and H-statements : see section 16

#### 4. FIRST AID MEASURES

##### 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. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion :

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

##### 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.

Symptoms/effects after skin contact :

Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact :  
Eye irritation.

Symptoms/effects after ingestion :  
None under normal conditions.

**Immediate medical attention and special treatment, if necessary**  
Treat symptomatically.

## **5. FIRE FIGHTING MEASURES**

**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.

**Specific hazards arising from the chemical**  
Fire hazard : Combustible liquid.  
Explosion hazard : No direct explosion hazard.

**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.

## **6. ACCIDENTAL RELEASE MEASURES**

**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.

**For non-emergency personnel**  
Protective equipment :  
Wear recommended personal protective equipment.

Emergency procedures :

Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.

**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.

**Environmental precautions**

Avoid release to the environment.

**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.

**Reference to other sections**

For further information refer to section 13.

## **7. HANDLING AND STORAGE**

**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. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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.

**Conditions for safe storage, including any incompatibilities**

Technical measures :

Keep in a cool, well-ventilated place away from heat.

Storage conditions :

Store in a well-ventilated place. Keep cool. Store locked up.

Packaging materials :

Store always product in container of same material as original container.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**TIMBERSILK (54464-57-2)**

Not applicable

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

Not applicable

**CITRAL (5392-40-5)**

ACGIH	Local name	Citral
ACGIH	ACGIH OEL TWA	5 ppm (IFV - Inhalable fraction and vapor)
ACGIH	Remark (ACGIH)	TLV® Basis: Body weight eff; URT irr; eye dam. Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen)
ACGIH	Regulatory reference	ACGIH 2024

**D-LIMONENE (5989-27-5)**

Not applicable

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

Not applicable

**GERANIOL (106-24-1)**

Not applicable

**ETHYL VANILLIN (121-32-4)**

Not applicable

**COUMARIN (91-64-5)**

Not applicable

**p-Mentha-1,4-diene (99-85-4)**

Not applicable

**AMYL ALCOHOL (71-41-0)**

Not applicable

**ALLYL CYCLO HEXYL PROPIONATE (2705-87-5)**

Not applicable

**ALLYL CAPROATE (123-68-2)**

Not applicable

**Appropriate engineering controls**

Appropriate engineering controls :

Ensure good ventilation of the work station.

Environmental exposure controls :

Avoid release to the environment.

**Individual protection measures/Personal protective equipment**

**Personal protective equipment:**

Wear recommended personal protective equipment.

**Hand protection:**

Protective gloves

**Eye protection:**

Safety glasses

**Skin and body protection:**

Wear suitable protective clothing

**Respiratory protection:**

[In case of inadequate ventilation] wear respiratory protection.

**Personal protective equipment symbol(s):**



Note: The information contained within this document was prepared by technical personnel and is believed to be true and accurate to the best of our knowledge. However, no warranty, express or implied, is provided regarding merchantability, fitness for a particular purpose, performance, safety, suitability, stability, or other aspects of the product. This information is not comprehensive and does not cover all potential conditions of use, handling, storage, disposal, or other factors that may involve legal, environmental, safety, or performance considerations. Natural Bulk Supplies accepts no liability for the use of or reliance upon this information. Our technical personnel are available to address inquiries, but the customer bears ultimate responsibility for the safe handling and use of the product. No suggestions for use are made that would encourage the infringement of existing patents or the violation of any Federal, State, local, or foreign laws.



## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical State	Liquid
Color	No data available
Odor	No data available
Odor Threshold	No data available
pH	No data available
Melting Point	No data available
Freezing Point	No data available
Boiling Point	No data available
Flash Point	≈ 90.9 °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	No data available
Solubility	No data available
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

### Other information

No additional information available

## 10. STABILITY AND REACTIVITY

### Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### Chemical stability

#### Possibility of hazardous reactions

No additional information available

### Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.  
None under recommended storage and handling conditions (see section 7).

### Incompatible materials

No additional information available

### Hazardous decomposition products

No additional information available

## 11. TOXICOLOGICAL INFORMATION

### Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

### TIMBERSILK (54464-57-2)

LD50 oral rat	≥ 5000 mg/kg body weight
LD50 dermal rat	≥ 5000 mg/kg body weight
ATE US (oral)	5000 mg/kg body weight
ATE US (dermal)	5000 mg/kg body weight

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

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	> 2 ml/kg (Modification of Draize 1959 method, 4 h, Rabbit, Experimental value, Dermal)
ATE US (oral)	1160 mg/kg body weight

**D-LIMONENE (5989-27-5)**

LD50 oral rat	> 2000 mg/kg body weight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Read-across, Oral)
LD50 dermal rabbit	> 5000 mg/kg body weight (Equivalent or similar to OECD 402, Rabbit, Weight of evidence, Dermal)

**GERANIOL (106-24-1)**

LD50 oral rat	3600 mg/kg body weight (Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Experimental value, Dermal)
ATE US (oral)	3600 mg/kg body weight

**ETHYL VANILLIN (121-32-4)**

LD50 oral rat	> 3160 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
ATE US (oral)	3000 mg/kg body weight

**COUMARIN (91-64-5)**

LD50 oral rat	293 mg/kg body weight (Rat, Male / female, Experimental value, Oral)
ATE US (oral)	290 mg/kg body weight

**p-Mentha-1,4-diene (99-85-4)**

ATE US (oral)	3650 mg/kg body weight
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**AMYL ALCOHOL (71-41-0)**

LD50 oral rat	3645 mg/kg (Equivalent or similar to OECD 401, Rat, Male/female, Experimental value, Oral)
LD50 dermal rabbit	2292 mg/kg (Equivalent or similar to OECD 402, 24 h,

	Rabbit, Male, Experimental value, Dermal)
ATE US (oral)	3645 mg/kg body weight
ATE US (dermal)	2290 mg/kg body weight

**AMYL ALCOHOL (71-41-0)**

ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

**ALLYL CYCLO HEXYL PROPIONATE (2705-87-5)**

ATE US (oral)	380 mg/kg body weight
ATE US (dermal)	1600 mg/kg body weight

**ALLYL CAPROATE (123-68-2)**

LD50 oral rat	218 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male/female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	820 mg/kg body weight (Equivalent or similar to OECD 402, Rabbit, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	0.297 mg/l (1 - 8 h, Rat, Male, Experimental value, Inhalation (vapours), 10 day(s))
ATE US (oral)	218 mg/kg body weight
ATE US (dermal)	300 mg/kg body weight
ATE US (gases)	700 ppmV/4h
ATE US (vapors)	0.297 mg/l/4h
ATE US (dust, mist)	0.297 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

**D-LIMONENE (5989-27-5)**

IARC group 3 - Not classifiable

**COUMARIN (91-64-5)**

IARC group 3 - Not classifiable

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

STOT-single exposure : Not classified

**AMYL ALCOHOL (71-41-0)**

STOT-single exposure

May cause respiratory irritation

STOT-repeated exposure : Not classified

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 : Eye irritation.

Symptoms/effects after ingestion : None under normal conditions..

## 12. ECOLOGICAL INFORMATION

### Toxicity

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

**TIMBERSILK (54464-57-2)**

LC50 - Fish [1]	≈ 1.3 mg/l Bluegill Sunfish
EC50 - Crustacea [1]	≈ 1.38 mg/l Water Flea
ErC50 algae	≈ 2.6 mg/l Green Algae

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

LC50 - Fish [1]	2.32 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP)
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)

**D-LIMONENE (5989-27-5)**

LC50 - Fish [1]	720 µg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	0.36 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)

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

LC50 - Fish [1]	11 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Cyprinus carpio)
EC50 - Crustacea [1]	15 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna)

**GERANIOL (106-24-1)**

LC50 - Fish [1]	22 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	10.8 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 algae	13.1 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)

**ETHYL VANILLIN (121-32-4)**

LC50 - Fish [1]	87.6 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
EC50 - Crustacea [1]	36.79 mg/l (OECD 202: Daphnia sp. Acute

	Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Read-across, GLP)
ErC50 algae	120 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Read-across, GLP)

#### **COUMARIN (91-64-5)**

LC50 - Fish [1]	2.94 mg/l (96 h, Pisces, QSAR)
EC50 - Crustacea [1]	24.3 – 36.9 mg/l (48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)

#### **AMYL ALCOHOL (71-41-0)**

BCF - Fish [1]	530 mg/l (Other, 96 h, Brachydanio rerio, Static system, Fresh water, Experimental value)
EC50 - Crustacea [1]	341 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)

#### **ALLYL CAPROATE (123-68-2)**

LC50 - Fish [1]	0.117 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	2 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
ErC50 algae	> 4.6 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)

#### **Persistence and degradability**

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

Persistence and degradability	Readily biodegradable in water.
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##### **D-LIMONENE (5989-27-5)**

Persistence and degradability	Readily biodegradable in water.
ThOD	3.29 g O <sub>2</sub> /g substance

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

Persistence and degradability	Readily biodegradable in water.
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**GERANIOL (106-24-1)**

Persistence and degradability	Readily biodegradable in water.
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**ETHYL VANILLIN (121-32-4)**

Persistence and degradability	Readily biodegradable in water.
ThOD	1.81 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.529 (5 day(s), Literature study)

**COUMARIN (91-64-5)**

Persistence and degradability	Readily biodegradable in water.
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**AMYL ALCOHOL (71-41-0)**

Persistence and degradability	Readily biodegradable in water. Readily biodegradable in water in anaerobic conditions.
Biochemical oxygen demand (BOD)	1.28 g O <sub>2</sub> /g substance
ThOD	2.73 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.47

**ALLYL CAPROATE (123-68-2)**

Persistence and degradability	Readily biodegradable in water.
ThOD	2.05 g O <sub>2</sub> /g substance

**Bioaccumulative potential**

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

BCF - Fish [1]	2.286 (BCFBAF v3.00, Pisces, QSAR)
Partition coefficient n-octanol/water (Log Pow)	3.97 (Experimental value, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).



**D-LIMONENE (5989-27-5)**

BCF - Fish [1]	864.8 – 1022 (Pisces, QSAR, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	4.38 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 37 °C)
Bioaccumulative potential	Potential for bioaccumulation ( $4 \geq \text{Log Kow} \leq 5$ ).

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

Partition coefficient n-octanol/water (Log Pow)	3.93 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation ( $\text{Log Kow} < 4$ ).

**GERANIOL (106-24-1)**

Partition coefficient n-octanol/water (Log Pow)	2.6 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25°C)
Bioaccumulative potential	Low potential for bioaccumulation ( $\text{Log Kow} < 4$ ).

**ETHYL VANILLIN (121-32-4)**

Partition coefficient n-octanol/water (Log Pow)	1.58 (Experimental value, Equivalent or similar to OECD 107, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation ( $\text{Log Kow} < 4$ ).

**COUMARIN (91-64-5)**

Partition coefficient n-octanol/water (Log Pow)	1.39 (QSAR, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation ( $\text{Log Kow} < 4$ ).

**AMYL ALCOHOL (71-41-0)**

Partition coefficient n-octanol/water (Log Pow)	1.16 – 1.56 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation ( $\text{Log Kow} < 4$ ).

**ALLYL CAPROATE (123-68-2)**

BCF - Fish [1]	59.2 – 102.3 l/kg (BCFBAF v3.01, Pisces, QSAR)
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Partition coefficient n-octanol/water (Log Pow)	3.191 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

### Mobility in soil

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

Surface tension	0.027 N/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)
Ecology - soil	Low potential for mobility in soil.

#### D-LIMONENE (5989-27-5)

Ecology - soil	Low potential for mobility in soil.
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#### LINALYL ACETATE (115-95-7)

Ecology - soil	Adsorbs into the soil.
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#### GERANIOL (106-24-1)

Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.85 (log Koc, PCKOCWIN v1.66, Calculated value)
Ecology - soil	Highly mobile in soil.

#### ETHYL VANILLIN (121-32-4)

Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.092 (log Koc, Equivalent or similar to OECD 106, Experimental value)
Ecology - soil	Low potential for mobility in soil.

#### COUMARIN (91-64-5)

Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.63 (log Koc, QSAR)
Ecology - soil	Highly mobile in soil.

**AMYL ALCOHOL (71-41-0)**

Surface tension	0.026 N/m (20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.8 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Ecology - soil	Highly mobile in soil.

**ALLYL CAPROATE (123-68-2)**

Ecology - soil	No (test)data on mobility of the substance available.
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**Other adverse effects**

No additional information available

**13. DISPOSAL CONSIDERATIONS**

**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.

**14. TRANSPORT INFORMATION**

**Department of Transportation (DOT)**

In accordance with DOT

Transport document description (DOT) : UN3082 Environmentally hazardous substances, liquid, n.o.s. (BENZYL BENZOATE), 9, III

UN-No.(DOT) : UN3082

Proper Shipping Name (DOT) : Environmentally hazardous substances, liquid, n.o.s.  
BENZYL BENZOATE

Class (DOT) : 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140

Packing group (DOT) : III - Minor Danger

Hazard labels (DOT) : 9 - Class 9 (Miscellaneous dangerous materials)



DOT Packaging Non Bulk (49 CFR 173.xxx) : 203

DOT Packaging Bulk (49 CFR 173.xxx) : 241

DOT Symbols : G - Identifies PSN requiring a technical name

DOT Special Provisions (49 CFR 172.102) :

8 - A hazardous substance that is not a hazardous waste may be shipped under the shipping description "Other regulated substances, liquid or solid, n.o.s.", as appropriate. In addition, for solid materials, special provision B54 applies.

146 - This description may be used for a material that poses a hazard to the environment but does not meet the definition for a hazardous waste or a hazardous substance, as defined in 171.8 of this subchapter, or any hazard class as defined in Part 173 of this subchapter, if it is designated as environmentally hazardous by the Competent Authority of the country of origin, transit or destination.

173 - An appropriate generic entry may be used for this material.

335 - Mixtures of solids that are not subject to this subchapter and environmentally hazardous liquids or solids may be classified as "Environmentally hazardous substances, solid, n.o.s.," UN3077 and may be transported under this entry, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each transport unit must be leak-proof when used as bulk packaging.

IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table

2 for UN2672).

T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling =  $97 / 1 + a (tr - tf)$  Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx) : 155

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : No Limit

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : No Limit

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

Emergency Response Guide (ERG) Number : 171

Other information : No supplementary information available.

## 15. REGULATORY INFORMATION

### US Federal regulations

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylcyclopenta- gamma-2-benzopyran	CAS-No. 1222-05-5	1 – 5%
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## 16. OTHER INFORMATION

Full text of H-phrases:

H226 Flammable liquid and vapor

H227 Combustible liquid

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

H318 Causes serious eye damage

H319 Causes serious eye irritation

H320 Causes eye irritation



H330 Fatal if inhaled  
H331 Toxic if inhaled  
H332 Harmful if inhaled  
H335 May cause respiratory irritation  
H361 Suspected of damaging fertility or the unborn child

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