

## Safety Data Sheet

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

Version: 1.1 Issue date: 01/27/2020 / Revision date: 08/29/2023 / Supersedes: 01/27/2020

### **SECTION 1: Identification**

Identification 1.1.

Product form Mixture

Product name RUSTIC ESCENTUALS™ TROPICAL FRUIT SLICES FRAGRANCE OIL

CAS-No. **MIXTURE** 

#### Recommended use and restrictions on use

No additional information available

#### **Supplier**

IndiMade Brands, LLC DBA Wholesale Supplies Plus 7820 E Pleasant Valley Road Independence, OH 44131 (800) 359-0944

www.WholesaleSuppliesPlus.com

#### 1.4. **Emergency telephone number**

: (800) 255-3924 Domestic USA, Canada, Puerto Rico, and US Virgin Islands **Emergency number** 

+1 813 248-0585 International

## SECTION 2: Hazard(s) identification

#### Classification of the substance or mixture

#### **GHS US classification**

Flammable liquids H226 Flammable liquid and vapor

Category 3 Skin corrosion/irritation H315

Causes skin irritation Category 2

Serious eye damage/eye H319 Causes serious eye irritation

irritation Category 2

Skin sensitization, H317 May cause an allergic skin reaction

Category 1

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) H226 - Flammable liquid and vapor

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation

Precautionary statements (GHS US) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P233 - Keep container tightly closed.

P240 - Ground/Bond container and receiving equipment.

P241 - Use explosion-proof electrical/ventilating/lighting equipment.

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge. 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.

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse

skin with water/shower.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

08/29/2023 EN (English US) Page 1

## Safety Data Sheet

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

contact lenses, if present and easy to do. Continue rinsing.

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.

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

accordance 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
ALDEHYDE C 16	(CAS-No.) 77-83-8	10 – 30	Skin Sens. 1B, H317
LIMONENE	(CAS-No.) 5989-27-5	10 – 30	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304
BENZALDEHYDE	(CAS-No.) 100-52-7	10 – 30	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:dust,mist), H332 Eye Irrit. 2, H319 STOT SE 3, H335
VANILLIN	(CAS-No.) 121-33-5	1 – 5	Eye Irrit. 2, H319
2-ethyl-3-hydroxypyran-4-one	(CAS-No.) 4940-11-8	1 – 5	Acute Tox. 4 (Oral), H302
FRUCTONE	(CAS-No.) 6413-10-1	1 – 5	Flam. Liq. 4, H227 Skin Corr. 1C, H314 Eye Dam. 1, H318
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 Acute Tox. 2 (Inhalation:dust,mist), H330
LINALOOL	(CAS-No.) 78-70-6	1 – 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317
LINALYL ACETATE	(CAS-No.) 115-95-7	< 0.5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317

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

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all 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.

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

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.

08/29/2023 EN (English US) 2/14

## Safety Data Sheet

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

Symptoms/effects after eye contact

: Eye irritation.

#### 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.

#### 5.2. Specific hazards arising from the chemical

Fire hazard : Flammable liquid and vapor.

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

Protection during firefighting

: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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

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

#### 6.1.1. For non-emergency personnel

**Emergency procedures** 

: 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.

#### 6.1.2. For emergency responders

Protective equipment

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

#### 6.2. Environmental precautions

Avoid release to the environment.

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

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

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. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. 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

: Ground/bond container and receiving equipment.

Storage conditions

: Store in a well-ventilated place. Keep cool. Keep container tightly closed.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

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

Not applicable

## **VANILLIN (121-33-5)**

Not applicable

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

Not applicable

08/29/2023 EN (English US) 3/14

## Safety Data Sheet

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

#### Linalool (78-70-6)

Not applicable

#### FRUCTONE (6413-10-1)

Not applicable

## ETHYL MALTOL (4940-11-8)

Not applicable

#### BENZALDEHYDE (100-52-7)

Not applicable

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

Not applicable

#### **ALDEHYDE C 16 (77-83-8)**

Not applicable

#### 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

#### Hand protection:

Protective gloves

#### Eye protection:

Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

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







### SECTION 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Color : Mixture contains one or more component(s) which have the following colour(s):

Colourless to light yellow White to light yellow On exposure to light: discolours Colourless light yellow White Colourless to light amber Light yellow to colourless On exposure to air: yellow-

brown On exposure to air: yellow

Odor : There may be no odour warning properties, odour is subjective and inadequate to warn of

overexposure.

Mixture contains one or more component(s) which have the following odour:

Lemon odour Mild odour Pleasant odour Characteristic odour Sweet odour Fruity odour Floral

odour Aromatic odour Almond odour Irritating/pungent odour

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 : ≈ 58.9 °C

08/29/2023 EN (English US) 4/14

## Safety Data Sheet

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

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 : No data available Decomposition temperature : No data available No data availableViscosity, kinematic Viscosity, dynamic : No data available **Explosion limits** : No data available Explosive properties : No data available Oxidizing properties : No data available

#### 9.2. Other information

No additional information available

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

#### 10.1. Reactivity

Flammable liquid and vapor.

#### 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

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

## 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

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)
VANILLIN (121-33-5)	
LD50 oral rat	3300 mg/kg body weight (Equivalent or similar to OECD 401, 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)	3300 mg/kg body weight
Linalool (78-70-6)	
LD50 oral rat	2790 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	5610 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Experimental

08/29/2023 EN (English US) 5/14

value, Dermal, 7 day(s))

## Safety Data Sheet

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

Linalool (78-70-6)	
ATE US (oral)	2790 mg/kg body weight
ATE US (dermal)	5610 mg/kg body weight
, ,	
ETHYL MALTOL (4940-11-8)	(450
LD50 oral rat	1150 mg/kg (Rat, Oral)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Dermal)
ATE US (oral)	1150 mg/kg body weight
BENZALDEHYDE (100-52-7)	
LD50 oral rat	1300 mg/kg (Rat, Oral)
LD50 dermal rat	> 1250 mg/kg (Rat, Dermal)
LD50 dermal rabbit	5000 mg/kg (Rabbit, Dermal)
ATE US (oral)	1300 mg/kg body weight
ATE US (dermal)	1100 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h
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
ALDEHYDE C 16 (77-83-8)	
LD50 oral rat	5470 mg/kg (Rat, Male/female, Weight of evidence, 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)
ATE US (oral)	5470 mg/kg body weight
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 I IMONENE (5000 27 5)	
D-LIMONENE (5989-27-5)	3 - Not classifiable
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
<del>-</del> •	
BENZALDEHYDE (100-52-7)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Linalool (78-70-6)	
NOAEL (dermal,rat/rabbit,90 days)	250 mg/kg body weight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

08/29/2023 EN (English US) 6/14

## Safety Data Sheet

**D-LIMONENE (5989-27-5)**Persistence and degradability

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

FRUCTONE (6413-10-1)	
NOAEL (oral,rat,90 days)	1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
spiration hazard	: Not classified
iscosity, kinematic	: No data available
•	
symptoms/effects after skin contact symptoms/effects after eye contact	<ul><li>: Irritation. May cause an allergic skin reaction.</li><li>: Eye irritation.</li></ul>
ymptoms/enects after eye contact	. Lye imaion.
SECTION 12: Ecological inform	ation
2.1. Toxicity	
cology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
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)
VANILLIN (121-33-5)	
LC50 - Fish [1]	57 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, Experimental value, GLP)
ErC50 algae	120 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, 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)
Linalool (78-70-6)	
LC50 - Fish [1]	27.8 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	59 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
ErC50 algae	156.7 mg/l (DIN 38412-9, 96 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)
FRUCTONE (6413-10-1)	
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
BENZALDEHYDE (100-52-7)	
LC50 - Fish [1]	11.2 mg/l (96 h, Salmo gairdneri, Flow-through system)
EC50 - Crustacea [1]	50 mg/l (24 h, Daphnia magna)
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)
ALDEHYDE C 16 (77-83-8)	
LC50 - Fish [1]	4.2 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, GLP)
ErC50 algae	36 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Station system, Fresh water, Experimental value, GLP)

08/29/2023 EN (English US) 7/14

Readily biodegradable in water.

## Safety Data Sheet

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

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

D-LINIONENE (3909-27-3)	
ThOD	3.29 g O <sub>2</sub> /g substance
VANILLIN (121-33-5)	
Persistence and degradability	Readily biodegradable in water.
LINALYL ACETATE (115-95-7)	
Persistence and degradability	Readily biodegradable in water.
	The same of the sa
Linalool (78-70-6) Persistence and degradability	Readily biodegradable in water.
•	Treatily blodegradable in water.
ETHYL MALTOL (4940-11-8)	
Persistence and degradability	Biodegradability in water: no data available.
BENZALDEHYDE (100-52-7)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.62 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.98 g O <sub>2</sub> /g substance
ThOD	2.42 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.67
ALLYL CAPROATE (123-68-2)	
Persistence and degradability	Readily biodegradable in water.
ThOD	2.05 g O₂/g substance
ALDEHYDE C 16 (77-83-8)	
Persistence and degradability	Not readily biodegradable in water.
12.3. Bioaccumulative potential	
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 ≥ Log Kow ≤ 5).
VANILLIN (121-33-5)	
Partition coefficient n-octanol/water (Log Pow)	1.17 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
LINALYL ACETATE (115-95-7)	
Partition coefficient n-octanol/water (Log Pow)	3.93 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Linalool (78-70-6)	
Partition coefficient n-octanol/water (Log Pow)	2.84 (Experimental value, Equivalent or similar to OECD 107, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
'	1 (=-3/)
ETHYL MALTOL (4940-11-8)	No. 100 commende from a feet of constitution
Bioaccumulative potential	No bioaccumulation data available.
BENZALDEHYDE (100-52-7)	
BCF - Other aquatic organisms [1]	4.2 – 7.8 (Estimated value)
Partition coefficient n-octanol/water (Log Pow)	1.48 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
ALLYL CAPROATE (123-68-2)	
BCF - Fish [1]	59.2 – 102.3 l/kg (BCFBAF v3.01, Pisces, QSAR)
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).
ALDEHYDE C 16 (77-83-8)	
Partition coefficient n-octanol/water (Log Pow)	2.4 – 2.8 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

08/29/2023 EN (English US) 8/14

## Safety Data Sheet

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

#### 12.4. Mobility in soil

D-LIMONENE (5989-27-5)		
Ecology - soil	Adsorbs into the soil.	
VANILLIN (121-33-5)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.438 (log Koc, Experimental value)	
Ecology - soil	Low potential for mobility in soil.	
LINALYL ACETATE (115-95-7)		
Ecology - soil	Adsorbs into the soil.	
Linalool (78-70-6)		
Surface tension	8.3 mN/m (20 °C, ISO 9101: Surface active agents - Determination of interfacial tension)	
Ecology - soil	No (test)data on mobility of the substance available.	
BENZALDEHYDE (100-52-7)		
Surface tension	0.04 N/m (20 °C)	
ALLYL CAPROATE (123-68-2)		
Ecology - soil	No (test)data on mobility of the substance available.	
ALDEHYDE C 16 (77-83-8)		
Surface tension	59 N/m (19.6 °C, 0.79 g/l, OECD 115: Surface Tension of Aqueous Solutions)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.34 – 2.74 (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.	

#### 12.5. Other adverse effects

No additional information available

## **SECTION 13: Disposal considerations**

## 13.1. Disposal methods

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

Additional information : Flammable vapors may accumulate in the container.

## **SECTION 14: Transport information**

#### **Department of Transportation (DOT)**

In accordance with DOT

Transport document description (DOT) : UN1169 Extracts, aromatic, liquid, 3, III

UN-No.(DOT) : UN1169

Proper Shipping Name (DOT) : Extracts, aromatic, liquid

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Packing group (DOT) : III - Minor Danger Hazard labels (DOT) : 3 - Flammable liquid



DOT Packaging Non Bulk (49 CFR 173.xxx) : 203 DOT Packaging Bulk (49 CFR 173.xxx) : 242

08/29/2023 EN (English US) 9/14

## Safety Data Sheet

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

DOT Special Provisions (49 CFR 172.102)

: B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable.

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).

T2 - 1.5 178.274(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.

DOT Packaging Exceptions (49 CFR 173.xxx) DOT Quantity Limitations Passenger aircraft/rail : 60 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 220 L

CFR 175.75)

**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

Other information : No supplementary information available.

**Transportation of Dangerous Goods** 

Transport document description (TDG) : UN1169 EXTRACTS, AROMATIC, LIQUID, 3, III

UN-No. (TDG) · UN1169

Proper Shipping Name (TDG) : EXTRACTS, AROMATIC, LIQUID TDG Primary Hazard Classes : 3 - Class 3 - Flammable Liquids

: III - Minor Danger Packing group (TDG)

**Explosive Limit and Limited Quantity Index** Passenger Carrying Road Vehicle or Passenger : 60 L

Carrying Railway Vehicle Index

Transport by sea

Transport document description (IMDG) : UN 1169 EXTRACTS, AROMATIC, LIQUID, 3, III

UN-No. (IMDG) : 1169

: EXTRACTS, AROMATIC, LIQUID Proper Shipping Name (IMDG)

Class (IMDG) : 3 - Flammable liquids

Packing group (IMDG) : III - substances presenting low danger

Limited quantities (IMDG)

Air transport

Transport document description (IATA) : UN 1197 Extracts, liquid for aroma, 3, III

UN-No. (IATA) : 1197

Proper Shipping Name (IATA) : Extracts, liquid for aroma Class (IATA) : 3 - Flammable Liquids Packing group (IATA) : III - Low danger

#### **SECTION 15: Regulatory information**

15.1. US Federal regulations

08/29/2023 EN (English US) 10/14

## Safety Data Sheet

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

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

LIMONENE	CAS-No. 5989-27-5	10 – 30%
VANILLIN	CAS-No. 121-33-5	1 – 5%
LINALYL ACETATE	CAS-No. 115-95-7	< 0.5%
LINALOOL	CAS-No. 78-70-6	1 – 5%
FRUCTONE	CAS-No. 6413-10-1	1 – 5%
2-ethyl-3-hydroxypyran-4-one	CAS-No. 4940-11-8	1 – 5%
BENZALDEHYDE	CAS-No. 100-52-7	10 – 30%
ALLYL CAPROATE	CAS-No. 123-68-2	1 – 5%
ALDEHYDE C 16	CAS-No. 77-83-8	10 – 30%

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

#### 15.2. International regulations

#### **CANADA**

<b>D-LIMONENE</b> (	5989-27-5	)
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Listed on the Canadian DSL (Domestic Substances List)

#### **VANILLIN (121-33-5)**

Listed on the Canadian DSL (Domestic Substances List)

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

Listed on the Canadian DSL (Domestic Substances List)

#### Linalool (78-70-6)

Listed on the Canadian DSL (Domestic Substances List)

## FRUCTONE (6413-10-1)

Listed on the Canadian DSL (Domestic Substances List)

#### ETHYL MALTOL (4940-11-8)

Listed on the Canadian DSL (Domestic Substances List)

### BENZALDEHYDE (100-52-7)

Listed on the Canadian DSL (Domestic Substances List)

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

Listed on the Canadian DSL (Domestic Substances List)

#### **ALDEHYDE C 16 (77-83-8)**

Listed on the Canadian DSL (Domestic Substances List)

#### **EU-Regulations**

No additional information available

### **National regulations**

08/29/2023 EN (English US) 11/14

## Safety Data Sheet

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

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

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

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ENCS (Existing New Chemical Substances) inventory

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the EC Inventory

Listed on the Australian HSIS Consolidated List

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

#### **VANILLIN (121-33-5)**

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

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ENCS (Existing New Chemical Substances) inventory

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the EC Inventory

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

#### 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)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ENCS (Existing New Chemical Substances) inventory

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the EC Inventory

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

## 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)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ENCS (Existing New Chemical Substances) inventory

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the EC Inventory

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

### FRUCTONE (6413-10-1)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ENCS (Existing New Chemical Substances) inventory

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the EC Inventory

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Listed on KECI (Korean Existing Chemicals Inventory)

08/29/2023 EN (English US) 12/14

## Safety Data Sheet

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

#### ETHYL MALTOL (4940-11-8)

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

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ENCS (Existing New Chemical Substances) inventory

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the EC Inventory

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

#### BENZALDEHYDE (100-52-7)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ENCS (Existing New Chemical Substances) inventory

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the EC Inventory

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on the Australian HSIS Consolidated List

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Listed on KECI (Korean Existing Chemicals Inventory)

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

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ENCS (Existing New Chemical Substances) inventory

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the EC Inventory

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Listed on KECI (Korean Existing Chemicals Inventory)

#### **ALDEHYDE C 16 (77-83-8)**

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ENCS (Existing New Chemical Substances) inventory

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the EC Inventory

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Listed on KECI (Korean Existing Chemicals Inventory)

### **SECTION 16: Other information**

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

Revision date : 08/29/2023

08/29/2023 EN (English US) 13/14

## Safety Data Sheet

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

## 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
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H330	Fatal if inhaled
H331	Toxic if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation

#### SDS US

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.

08/29/2023 EN (English US) 14/14