

Version: 1.1

Safety Data Sheet

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

Issue date: 02/21/2023 Revision date: 03/27/2023 Supersedes: 02/21/2023

SECTION 1: Identification

Identification 1.1.

 Mixture Product form

Product name MARACUYA SOLVENT FREE TERPENE FLAVOR

Product code **TPRI 172**

1.2. Recommended use and restrictions on use

1.3. **Supplier**

EXTRACT CONSULTANTS, LLC. TERPENES - FLAVORS - BASES PO BOX 11433, DENVER, CO 80211 www.extractconsultants.com INFORMATION: 1-888-541-9089

Emergency telephone number

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

CCN 13010

SECTION 2: Hazard(s) identification

Classification of the substance or mixture

GHS US classification

Flammable liquids Category 3 Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 1

Skin sensitization, Category 1 Carcinogenicity Category 2

Reproductive toxicity Category 2 Aspiration hazard Category 1

Flammable liquid and vapor Causes skin irritation Causes serious eye damage May cause an allergic skin reaction Suspected of causing cancer

Suspected of damaging fertility or the unborn child May be fatal if swallowed and enters airways

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)



GHS05





Signal word (GHS US) : Danger

Flammable liquid and vapor Hazard statements (GHS US)

May be fatal if swallowed and enters airways

Causes skin irritation

May cause an allergic skin reaction Causes serious eye damage Suspected of causing cancer

Suspected of damaging fertility or the unborn child

Obtain special instructions before use. Precautionary statements (GHS US)

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

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

smoking.

Keep container tightly closed.

Ground/Bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge. 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 swallowed: Immediately call a poison center or doctor.

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If on skin: Wash with plenty of water.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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).

Do NOT induce vomiting.

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.

In case of fire: Use media other than water to extinguish.

Store in a well-ventilated place. Keep cool.

Store locked up.

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

SECTION 3: Composition/Information on ingredients

3.1. **Substances**

Not applicable

3.2. **Mixtures**

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Name	Product identifier	%	GHS US classification
D-LIMONENE	(CAS-No.) 5989-27-5	10 – 25	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304
MYRCENE	(CAS-No.) 123-35-3	10 – 25	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Asp. Tox. 1, H304
BETA CARYOPHYLLENE	(CAS-No.) 87-44-5	10 – 25	Skin Sens. 1B, H317 Asp. Tox. 1, H304
BETA-PINENES	(CAS-No.) 127-91-3	10 – 25	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304
L-ALPHA-PINENE	(CAS-No.) 7785-26-4	5 – 10	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304
LINALOOL	(CAS-No.) 78-70-6	5 – 10	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1B, H317
GERANIOL	(CAS-No.) 106-24-1	5 – 10	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317
ALPHA-TERPINEOL	(CAS-No.) 98-55-5	1 – 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2, H319
CITRONELLOL	(CAS-No.) 106-22-9	1 – 5	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1B, H317
ALLYL HEPTANOATE	(CAS-No.) 142-19-8	1 – 5	Flam. Liq. 4, H227 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:vapour), H331
GAMMA-TERPINENE	(CAS-No.) 99-85-4	0.1 – 1	Flam. Liq. 3, H226 Repr. 2, H361 Asp. Tox. 1, H304
D-PULEGONE	(CAS-No.) 89-82-7	0.1 – 1	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Carc. 2, H351

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 : Call a physician immediately.

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. Call a physician immediately.

First-aid measures after ingestion : Do not induce vomiting. Call a physician immediately.

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

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 : Risk of lung edema.

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.

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5.2. Specific hazards arising from the chemical

Fire hazard : Flammable liquid and vapor.
Reactivity : 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. 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.

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. Store locked up.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

MARACUYA SOLVENT FREE TERPENE FLAVOR

No additional information available

CITRONELLOL (106-22-9)

No additional information available

GERANIOL (106-24-1)

No additional information available

LINALOOL (78-70-6)

No additional information available

D-LIMONENE (5989-27-5)

No additional information available

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ALPHA-TERPINEOL (98-55-5)		
No additional information available		
BETA-PINENES (127-91-3)		
USA - ACGIH - Occupational Exposure Limits		
Local name	β-Pimene	
ACGIH OEL TWA [ppm]	20 ppm	
Remark (ACGIH)	TLV® Basis: Lung irr. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen)	
Regulatory reference	ACGIH 2022	
L-ALPHA-PINENE (7785-26-4)		
No additional information available		
GAMMA-TERPINENE (99-85-4)		
No additional information available		
D-PULEGONE (89-82-7)		
No additional information available		
ALLYL HEPTANOATE (142-19-8)		
No additional information available		
BETA CARYOPHYLLENE (87-44-5)		
No additional information available		
MYRCENE (123-35-3)		
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

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.



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Color : YELLOW TO AMBER/ORANGE

Odor : CHARACTERISTIC, MATCHING 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 No data available

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Flash point : 49 °C

Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : Not applicable.

Vapor pressure : No data available Relative vapor density at 20°C : No data available

Relative density : 0.8593 (0.8493 – 0.8693)

Solubility : Insoluble.

Partition coefficient n-octanol/water (Log Pow) : No data available : No data available Auto-ignition temperature : No data available Decomposition temperature Viscosity, kinematic : No data available : No data available Viscosity, dynamic : No data available **Explosion limits** : No data available Explosive properties Oxidizing properties : No data available

9.2. Other information

Refractive index : 1.47468 (1.46468 – 1.48468)

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

CITRONELLOL (106-22-9)		
LD50 oral rat	3450 mg/kg (Rat, Inconclusive, insufficient data, Oral)	
LD50 dermal rabbit	2650 mg/kg (Rabbit, Inconclusive, insufficient data, Dermal)	
ATE US (oral)	3450 mg/kg body weight	
ATE US (dermal)	2650 mg/kg body weight	
GERANIOL (106-24-1)		
ATE US (oral)	3600 mg/kg body weight	
LINALOOL (78-70-6)		
ATE US (oral)	2790 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, 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))	

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4300 mg/kg body weight Animat: rat. Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 59% CL: 2900 5700 - 5700	ALPHA-TERPINEOL (98-55-5)	
(Acute Oral Toxicity), 95% Ct.: 2900 - 5700 Acute Drama Toxicity) Acute Drama Toxicity) Acute Drama Toxicity) Acute Drama Toxicity) Acute Drama Toxicity		4300 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401
Toxicity 4300 mg/kg body weight		(Acute Oral Toxicity), 95% CL: 2900 - 5700
BETA-PINENES (127-91-3) 4700 mg/kg (Rat, Oral) ATE US (oral) 4700 mg/kg body weight ATE US (oral) 4700 mg/kg body weight ATE US (oral) 500 mg/kg body weight ATE US (oral) 3850 mg/kg body weight ATE US (oral) 470 mg/kg body weight Arimal: rat. Guideline: OECD Guideline 401 (Acute Oral Toxicity) ATE US (oral rat	LD50 dermal rat	
LD50 oral rat	ATE US (oral)	4300 mg/kg body weight
ATE US (oral) 4700 mg/kg body weight LALPHA-PINENE (778-26-4) ATE US (oral) 500 mg/kg body weight GAMMA-TERPINENE (99-85-4) ATE US (oral) 3850 mg/kg body weight D-PULEGONE (89-32-7) ATE US (oral) 470 mg/kg body weight ATE US (oral) 470 mg/kg body weight ATE US (oral) 3090 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity) ATE US (oral) 218 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) ATE US (oral) 218 mg/kg body weight Animal: rat-bit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) ATE US (oral) 218 mg/kg body weight Animal: rat-bit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) ATE US (oral) 218 mg/kg body weight Animal: rat-bit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) ATE US (oran) 810 mg/kg body weight Animal: rat-bit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) ATE US (vapors) 3 mg/4h WYRCENE (123-35-3) LD50 oral rat > 11390 mg/kg body weight Animal: rat-bit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) Serious eye damage/irritation : Causes serious eye damage. Respiratory or skin sensitization : May cause an allergic skin reaction. Germ cell mutagenicity : Not classified Carcinogenicity : Suspected of causing cancer. D-LIMONENE (6989-27-5) LARC group 3 - Not classified D-PULEGONE (89-82-7) LARC group 2B - Possibly carcinogenic to humans MYRCENE (123-35-3) LARC group 2B - Possibly carcinogenic to humans MYRCENE (123-35-3) LARC group 2B - Possibly carcinogenic to humans MYRCENE (123-35-3) LARC group 2B - Possibly carcinogenic to humans STOT-single exposure : Not classified ALPHA-TERPINEOL (98-85-5) NOAEL (cart, art, 90 days) ≥ 314 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-	BETA-PINENES (127-91-3)	
L'ALPHA-PINENE (7785-26-4) ATE US (oral) 500 mg/kg body weight ATE US (oral) 3850 mg/kg body weight D-PULEGONE (89-82-7) ATE US (oral) 470 mg/kg body weight ATE US (oral) 3090 mg/kg body weight ATE US (oral) 470 mg/kg body weight ATE US (oral) 470 mg/kg body weight ATE US (oral) 470 mg/kg body weight ATE US (dermal) 3090 mg/kg body weight ATE US (dermal) 218 mg/kg body weight ATE US (oral) 3 mg/l/4 MYRCENE (123-35-3) LD50 dermal rabbit > 11390 mg/kg body weight LD50 dermal rabbit > 1000 mg/kg body weight ATE US (oran) 3 mg/l/4 MYRCENE (123-35-3) LD50 dermal rabbit > 1000 mg/kg body weight LD50 dermal rabbit > 1000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal roxicity) Skin cornosion/irritation C auses skin irritation. Serious eye damage/irritation C auses skin irritation. Supected of causing cancer. D-PULEGONE (89-82-7) IARC group 28 - Possibly carcinogenic to humans MYRCENE (123-35-3) IARC group 28 - Possibly carcinogenic to humans MYRCENE (123-35-3) IARC group 28 - Possibly carcinogenic to humans MYRCENE (123-35-3) IARC group 28 - Possibly carcinogenic to humans MYRCENE (123-35-3) IARC group 28 - Possibly carc	LD50 oral rat	4700 mg/kg (Rat, Oral)
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ALPHA-TERPINEOL (98-55-5) NOAEL (oral,rat,90 days) ≥ 314 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-	STOT-single exposure	: Not classified
NOAEL (oral,rat,90 days) ≥ 314 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-	STOT-repeated exposure	: Not classified
	NOAEL (oral,rat,90 days)	

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MYRCENE (123-35-3)	
LOAEL (oral,rat,90 days)	250 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day
	Oral Toxicity Study in Rodents)
NOAEL (subchronic,oral,animal/male,90 days)	500 mg/kg body weight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (subchronic,oral,animal/female,90 days)	250 mg/kg body weight Animal: mouse, Animal sex: female, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
Aspiration hazard	: May be fatal if swallowed and enters airways.
/iscosity, kinematic	: No data available
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
	: Serious damage to eyes.
· · · · · · · · · · · · · · · · · · ·	: Risk of lung edema.
	. Not of lang caoma.
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.
CITRONELLOL (106-22-9)	
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)
D-LIMONENE (5989-27-5)	
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
ErC50 algae	0.32 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
ALPHA-TERPINEOL (98-55-5)	
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
BETA-PINENES (127-91-3)	
LC50 - Fish [1]	0.557 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Cyprinus carpio, Semi-static system, Fresh water, Weight of evidence, Other isomer)
ErC50 algae	0.826 mg/l (OECD 201: Alga, Growth Inhibition Test, 48 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Weight of evidence, Other isomer)
ALLYL HEPTANOATE (142-19-8)	
LC50 - Fish [1]	0.117 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	0.89 mg/l Test organisms (species): Daphnia magna
BETA CARYOPHYLLENE (87-44-5)	
EC50 - Crustacea [1]	> 0.17 mg/l Test organisms (species): Daphnia magna
MYRCENE (123-35-3)	
EC50 - Crustacea [1]	1.47 mg/l Test organisms (species): Daphnia magna
12.2. Persistence and degradability	
CITRONELLOL (106-22-9)	
Persistence and degradability	Readily biodegradable in water.
Chemical oxygen demand (COD)	2.05 g O ₂ /g substance
ThOD	2.961 g O₂/g substance
D-LIMONENE (5989-27-5)	
Persistence and degradability	Readily biodegradable in water.
ThOD	3.29 g O ₂ /g substance

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BETA-PINENES (127-91-3)	
Persistence and degradability	Readily biodegradable in water.

12.3. Bioaccumulative potential

CITRONELLOL (106-22-9)	
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).

D-LIMONENE (5989-27-5)		
BCF - Fish [1]	864.8 I/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).	

BETA-PINENES (127-91-3)	
BCF - Fish [1]	1125 l/kg (BCFBAF v3.01, Pisces, Fresh water, QSAR, Other isomer)
Partition coefficient n-octanol/water (Log Pow)	4.425 (Similar product, Read-across, Equivalent or similar to OECD 107, 25 °C)
Bioaccumulative potential	Potential for bioaccumulation (4 ≤ Log Kow ≤ 5).

12.4. Mobility in soil

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.

D-LIMONENE (5989-27-5)	
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.

BETA-PINENES (127-91-3)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.009 – 3.836 (log Koc, Calculated value, Other isomer)
Ecology - soil	Low potential for mobility 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) : UN1197 Extracts, flavoring, liquid (Regulated for Bulk only), 3, III

UN-No.(DOT) : UN1197

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

(Regulated for Bulk only)

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

Packing group (DOT) : III - Minor Danger

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: 3 - Flammable liquid Hazard labels (DOT)



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

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) : 150 DOT Quantity Limitations Passenger aircraft/rail : 60 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 220 L

CFR 175.75)

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

passenger vessel.

Emergency Response Guide (ERG) Number

Other information : No supplementary information available.

Transportation of Dangerous Goods

Transport document description (TDG) : UN1197 EXTRACTS, FLAVOURING, LIQUID (Regulated for Bulk only), 3, III

UN-No. (TDG) · UN1197

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

Packing group (TDG) : III - Minor Danger

Explosive Limit and Limited Quantity Index : 5 L Passenger Carrying Road Vehicle or Passenger : 60 L

Carrying Railway Vehicle Index

Transport by sea

Transport document description (IMDG) : UN 1197 EXTRACTS, FLAVOURING, LIQUID, 3, III

UN-No. (IMDG)

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

Class (IMDG) : 3 - Flammable liquids

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

Limited quantities (IMDG) : 5 L

Air transport

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

UN-No. (IATA) : 1197

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

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SECTION 15: Regulatory information

15.1. US Federal regulations

ALLYL HEPTANOATE (142-19-8)

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

15.2. International regulations

CANADA

CITRONELLOL (106-22-9)

Listed on the Canadian DSL (Domestic Substances List)

GERANIOL (106-24-1)

Listed on the Canadian DSL (Domestic Substances List)

LINALOOL (78-70-6)

Listed on the Canadian DSL (Domestic Substances List)

D-LIMONENE (5989-27-5)

Listed on the Canadian DSL (Domestic Substances List)

ALPHA-TERPINEOL (98-55-5)

Listed on the Canadian DSL (Domestic Substances List)

BETA-PINENES (127-91-3)

Listed on the Canadian DSL (Domestic Substances List)

L-ALPHA-PINENE (7785-26-4)

Listed on the Canadian NDSL (Non-Domestic Substances List)

GAMMA-TERPINENE (99-85-4)

Listed on the Canadian DSL (Domestic Substances List)

D-PULEGONE (89-82-7)

Listed on the Canadian DSL (Domestic Substances List)

ALLYL HEPTANOATE (142-19-8)

Listed on the Canadian DSL (Domestic Substances List)

BETA CARYOPHYLLENE (87-44-5)

Listed on the Canadian DSL (Domestic Substances List)

MYRCENE (123-35-3)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

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)

GERANIOL (106-24-1)

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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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)

ALPHA-TERPINEOL (98-55-5)

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

BETA-PINENES (127-91-3)

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

L-ALPHA-PINENE (7785-26-4)

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

GAMMA-TERPINENE (99-85-4)

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

D-PULEGONE (89-82-7)

Listed on IARC (International Agency for Research on Cancer)

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

BETA CARYOPHYLLENE (87-44-5)

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

MYRCENE (123-35-3)

Listed on IARC (International Agency for Research on Cancer)

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

This product can expose you to methyl eugenol, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.



This product can expose you to d-pulegone, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

This product can expose you to myrcene, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

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Full text of H-phrases:

toxt of Fightages.	
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
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child

SDS US (GHS HazCom 2012)

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.

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