

### Safety Data Sheet

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

Issue date: 03/28/2022 Revision date: 08/30/2022 Supersedes: 08/12/2022

Version: 2.2

### **SECTION 1: Identification**

1.1. Identification

Product form : Mixture

Product name : YOU'RE A MEAN ONE, MR. GRINCH

Product code : FRAGRANCE

### 1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Voyageur Soap & Candle Company Ltd. 14-19257 Enterprise Way Surrey, BC - Canada

T 800-758-7773

sales@voyageursoapandcandle.com

### 1.4. Emergency telephone number

Emergency number : INFOTRAC (US & Canada) 1-800-535-5053 | (International) 1-352-323-3500

### SECTION 2: Hazard(s) identification

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

#### **GHS US classification**

Flammable liquids H227 Combustible liquid

Category 4

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

Carcinogenicity Category 2 H351 Suspected of causing cancer

Reproductive toxicity H361 Suspected of damaging fertility or the unborn child

Category 2

Full text of H statements : see section 16

### 2.2. 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 H351 - Suspected of causing cancer

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.

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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.

### 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
LIMONENE	(CAS-No.) 5989-27-5	5 – 10	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304
CITRAL	(CAS-No.) 5392-40-5	5 – 10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
ALDEHYDE C8	(CAS-No.) 124-13-0	1 – 5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319
LINALOOL	(CAS-No.) 78-70-6	1 – 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317
VANILLIN	(CAS-No.) 121-33-5	1 – 5	Eye Irrit. 2, H319
ALDEHYDE C 10	(CAS-No.) 112-31-2	1 – 5	Flam. Liq. 4, H227 Eye Irrit. 2, H319
2-ethyl-3-hydroxypyran-4-one	(CAS-No.) 4940-11-8	1 – 5	Acute Tox. 4 (Oral), H302
p-Mentha-1,4-diene	(CAS-No.) 99-85-4	1 – 5	Flam. Liq. 3, H226 Asp. Tox. 1, H304
GERANIOL	(CAS-No.) 106-24-1	1 – 5	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317
TERPINOLENE	(CAS-No.) 586-62-9	1 – 5	Flam. Liq. 3, H226 Skin Sens. 1B, H317 Asp. Tox. 1, H304
P-CYMENE	(CAS-No.) 99-87-6	< 0.5	Flam. Liq. 3, H226 Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Inhalation:dust,mist), H331 Repr. 2, H361 Asp. Tox. 1, H304
Myrcene	(CAS-No.) 123-35-3	< 0.5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 2, H351 Asp. Tox. 1, H304

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

### **SECTION 4: First-aid measures**

### 4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs:

Get medical advice/attention.

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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.

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 : Combustible liquid.

### 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. Wear personal protective equipment. Obtain

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.

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

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

### **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

### **ALDEHYDE C8 (124-13-0)**

Not applicable

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ALDEHYDE C 10 (112-31-2)			
Not applicable			
CITRAL (5392-40-5)			
ACGIH	Local name	Citral	
ACGIH	ACGIH OEL TWA [ppm]	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 2018	
ETHYL MALTOL (4940-11-8)			

Not applicable

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

Not applicable

### **GAMMA TERPINENE (99-85-4)**

Not applicable

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

Not applicable

### Myrcene (123-35-3)

Not applicable

### p-Cymene (99-87-6)

Not applicable

### Linalool (78-70-6)

Not applicable

### **Terpinolene (586-62-9)**

Not applicable

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

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

### Hand protection:

Protective gloves

### Eye protection:

Safety glasses

### Skin and body protection:

Wear suitable protective clothing

### Respiratory protection:

Wear respiratory protection.

### **SECTION 9: Physical and chemical properties**

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

Physical state : Liquid

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

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

discolours

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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:

Fruity odour Strong odour Lemon odour Floral odour Aromatic odour Mild odour Sweet odour

Pine odour Characteristic odour Peppermint odour Pleasant 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 :  $\approx 67.1 \,^{\circ}\text{C}$ 

Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : Not applicable. : No data available Vapor pressure Relative vapor density at 20 °C No data available Relative density : No data available No data available Solubility Partition coefficient n-octanol/water (Log Pow) : No data available : No data available Auto-ignition temperature Decomposition temperature : No data available No data availableViscosity, kinematic : No data available : No data available Viscosity, dynamic : No data available **Explosion limits** 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

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

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

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

ALDEHYDE C8 (124-13-0)		
LD50 oral rat 4617 mg/kg body weight (Rat, Male, Experimental value, Oral, 14 day(s))		
LD50 dermal rabbit 5207 mg/kg (24 h, Rabbit, Male, Experimental value, Dermal, 14 day(s))		
LC50 Inhalation - Rat	> 830 mg/m³ air (1 - 8 h, Rat, Male, Experimental value, Inhalation (vapours), 14 day(s))	
ATE US (oral) 4617 mg/kg body weight		

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ALDEHYDE C8 (124-13-0)		
ATE US (dermal)	5207 mg/kg body weight	
ALDEHYDE C 10 (112-31-2)		
LD50 oral rat	3096 mg/kg (Rat, Oral)	
LD50 dermal rabbit	4183 mg/kg (Rabbit, Dermal)	
ATE US (oral)	3096 mg/kg body weight	
ATE US (dermal)	4183 mg/kg body weight	
CITRAL (5392-40-5)		
ATE US (dermal)	2250 mg/kg body weight	
ETHYL MALTOL (4940-11-8)		
LD50 oral rat	1150 mg/kg (Rat, Oral)	
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Dermal)	
ATE US (oral)	1150 mg/kg body weight	
GERANIOL (106-24-1)	- The triangular and the same a	
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	
,	3000 mg/kg body weight	
GAMMA TERPINENE (99-85-4)	2950 malka hody weight	
ATE US (oral)	3850 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)	
Myrcene (123-35-3)		
LD50 oral rat	> 11390 mg/kg body weight Animal: rat	
LD50 dermal rabbit	> 5000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)	
p-Cymene (99-87-6)		
ATE US (oral)	4750 mg/kg body weight	
ATE US (gases)	700 ppmV/4h	
ATE US (vapors)	9.7 mg/l/4h	
ATE US (dust, mist)	0.5 mg/l/4h	
Linalool (78-70-6)		
LD50 oral rat	2790 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental	
EB30 Garrat	value, Oral, 14 day(s))	
LD50 dermal rabbit	5610 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Experimental value, Dermal, 7 day(s))	
ATE US (oral)	2790 mg/kg body weight	
ATE US (dermal)	5610 mg/kg body weight	
Terpinolene (586-62-9)		
ATE US (oral)	3775 mg/kg body weight	
VANILLIN (121-33-5)		
LD50 oral rat	3300 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental	
LD50 dermal rat	value, Oral, 14 day(s)) > 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	
Skin corrosion/irritation	: Causes skin irritation.	
Serious eye damage/irritation	: Causes serious eye irritation.	
Respiratory or skin sensitization	: May cause an allergic skin reaction.	
	. Not alongified	
Germ cell mutagenicity	: Not classified	

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IARC group

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

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3 - Not classifiable

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Myrcene (123-35-3)			
IARC group	2B - Possibly carcinogenic to humans		
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.		
STOT-single exposure	: Not classified		
STOT-repeated exposure	: Not classified		
Myrcene (123-35-3)	050 // / / / / / / / / / / / / / / / / /		
LOAEL (oral,rat,90 days)	250 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity 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 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 in Rodents)		
• ,	(Nopolica 2000 00 Day Oral Toxiolity III Nodollita)		
Linalool (78-70-6)	ATT		
NOAEL (dermal,rat/rabbit,90 days)	250 mg/kg body weight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)		
Aspiration hazard	: Not classified		
Viscosity, kinematic	: No data available		
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.		
, ,	, ,		
	•		
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.		
ALDEHYDE C8 (124-13-0)			
EC50 - Crustacea [1]	1.54 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Flow-through system, Fresh water, Read-across, Locomotor effect)		
ErC50 algae	4.5 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata,		
	Static system, Fresh water, Experimental value, GLP)		
OFPANIOL (400 04 4)			
GERANIOL (106-24-1)	20 and 1/OFOR 202. Fight Assists Taylight, Test 200 h. David saving Challe system. Facebourges		
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)		
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)		
Myrcene (123-35-3)			
EC50 - Crustacea [1]	0.45 mg/l		
EC50 - Crustacea [1]	0.45 mg/l		
EC50 - Crustacea [1]  Linalool (78-70-6)	0.45 mg/l  27.8 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system,		
EC50 - Crustacea [1]			

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Linalool (78-70-6) EC50 - Crustacea [1]

ErC50 algae

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ErC50 algae	156.7 mg/l (DIN 38412-9, 96 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)	
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)	
12.2. Persistence and degradability		
ALDEHYDE C8 (124-13-0)		
Persistence and degradability	Biodegradable in the soil. Not readily biodegradable in water. Inherently biodegradable.	
ALDEHYDE C 10 (112-31-2)		
Persistence and degradability	Not readily biodegradable in water.	
BOD (% of ThOD)	0.022 (5 day(s), Literature study)	
ETHYL MALTOL (4940-11-8)		
Persistence and degradability	Biodegradability in water: no data available.	
GERANIOL (106-24-1)		
Persistence and degradability	Readily biodegradable in water.	
D-LIMONENE (5989-27-5)		
Persistence and degradability	Readily biodegradable in water.	
ThOD	3.29 g O <sub>2</sub> /g substance	
Linalool (78-70-6)		
Persistence and degradability	Readily biodegradable in water.	
VANILLIN (121-33-5)		
Persistence and degradability	Readily biodegradable in water.	
12.3. Bioaccumulative potential		
ALDEHYDE C8 (124-13-0)		
BCF - Other aquatic organisms [1]	94.69 (BCFBAF v3.01, Estimated value, Fresh weight)	
Partition coefficient n-octanol/water (Log Pow)	305 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
ALDEHYDE C 10 (112-31-2)		
BCF - Other aquatic organisms [1]	420 (QSAR)	
Partition coefficient n-octanol/water (Log Pow)	3.76 (Estimated value)	
Bioaccumulative potential	Bioaccumable.	
ETHYL MALTOL (4940-11-8)		
Bioaccumulative potential	No bioaccumulation data available.	
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 (Log Kow < 4).	
Bioaccumulative potential  D-LIMONENE (5989-27-5)	Low potential for bioaccumulation (Log Kow < 4).	
<u>'</u>	Low potential for bioaccumulation (Log Kow < 4).  864.8 – 1022 (Pisces, QSAR, Fresh weight)	
D-LIMONENE (5989-27-5)		

system, Fresh water, Experimental value, GLP)

59 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static

156.7 mg/l (DIN 38412-9, 96 h, Desmodesmus subspicatus, Static system, Fresh water,

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Linalool (78-70-6)		
Partition coefficient n-octanol/water (Log Pow)	2.84 (Experimental value, Equivalent or similar to OECD 107, 25 °C)	
Sioaccumulative potential Low potential for bioaccumulation (Log Kow < 4).		
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).	

### 12.4. Mobility in soil

ALDEHYDE C8 (124-13-0)		
Surface tension	0.028 N/m (20 °C)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.9 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Weight of evidence)	
Ecology - soil	Highly mobile in soil.	
ALDEHVDE C 10 (112-31-2)		

### ALDEHYDE C 10 (112-31-2)

Surface tension 0.028 N/m

G	GERANIOL (106-24-1)		
	Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.85 (log Koc, PCKOCWIN v1.66, Calculated value)	
Е	Cology - soil	Highly mobile in soil.	

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

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.	

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.	

### 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.

### **SECTION 14: Transport information**

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

In accordance with DOT

Not regulated

### **Transportation of Dangerous Goods**

Transport document description (TDG) : UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (LIMONENE);

ALDEHYDE C8), 9, III

UN-No. (TDG) : UN3082

Proper Shipping Name (TDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. TDG Primary Hazard Classes : 9 - Class 9 - Miscellaneous Products, Substances or Organisms

Packing group (TDG) : III - Minor Danger

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**TDG Special Provisions** 

: 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A) of Part 3 (Documentation). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4 (Dangerous Goods Safety Marks). (2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name:

(a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S;

(b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S;

(c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S; (d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or

(e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S.

(3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment:

(a) UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or

(b) UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS, 99 - (1) Mixtures of solids that are not dangerous goods and liquids or solids that are UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S, or UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S, may be handled, offered for transport or transported as UN3077 if there is no visible liquid when the dangerous goods are loaded into a means containment and during transport.

(2) These Regulations, except for Part 1 (Coming into Force, Repeal, Interpretation, General Provisions and Special Cases) and Part 2 (Classification), do not apply to the handling, offering

for transport or transporting of less than 450 kg of UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S, or less than 450 L of UN3082,

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S, on a road vehicle or a railway vehicle. The dangerous goods must be contained in one or more small means of containment designed, constructed, filled, closed, secured and maintained so that under normal conditions of transport, including handling, there will be no accidental release of the dangerous

goods that could endanger public safety.

**Explosive Limit and Limited Quantity Index** : 5 L

### Transport by sea

: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (LIMONENE; Transport document description (IMDG)

ALDEHYDE C8), 9, III, MARINE POLLUTANT

UN-No. (IMDG)

Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Class (IMDG) : 9 - Miscellaneous dangerous substances and articles

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

Limited quantities (IMDG) : 5 L

### Air transport

Transport document description (IATA) : UN 3082 Environmentally hazardous substance, liquid, n.o.s. (LIMONENE; ALDEHYDE C8),

9, III

UN-No. (IATA)

Proper Shipping Name (IATA) : Environmentally hazardous substance, liquid, n.o.s. Class (IATA) : 9 - Miscellaneous Dangerous Substances and Articles

Packing group (IATA) : III - Minor Danger

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

### 15.1. US Federal regulations

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

ALDEHYDE C8	CAS-No. 124-13-0	1 – 5%
ALDEHYDE C 10	CAS-No. 112-31-2	1 – 5%
CITRAL	CAS-No. 5392-40-5	5 – 10%
2-ethyl-3-hydroxypyran-4-one	CAS-No. 4940-11-8	1 – 5%
GERANIOL	CAS-No. 106-24-1	1 – 5%
p-Mentha-1,4-diene	CAS-No. 99-85-4	1 – 5%
LIMONENE	CAS-No. 5989-27-5	5 – 10%
Myrcene	CAS-No. 123-35-3	< 0.5%
P-CYMENE	CAS-No. 99-87-6	< 0.5%
LINALOOL	CAS-No. 78-70-6	1 – 5%
TERPINOLENE	CAS-No. 586-62-9	1 – 5%
VANILLIN	CAS-No. 121-33-5	1 – 5%

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**

Listed on the Canadian DSL (Domestic Substances List)

### ALDEHYDE C 10 (112-31-2)

Listed on the Canadian DSL (Domestic Substances List)

### CITRAL (5392-40-5)

Listed on the Canadian DSL (Domestic Substances List)

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

Listed on the Canadian DSL (Domestic Substances List)

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

Listed on the Canadian DSL (Domestic Substances List)

### **GAMMA TERPINENE (99-85-4)**

Listed on the Canadian DSL (Domestic Substances List)

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

Listed on the Canadian DSL (Domestic Substances List)

### Myrcene (123-35-3)

Listed on the Canadian DSL (Domestic Substances List)

### p-Cymene (99-87-6)

Listed on the Canadian DSL (Domestic Substances List)

### Linalool (78-70-6)

Listed on the Canadian DSL (Domestic Substances List)

### Terpinolene (586-62-9)

Listed on the Canadian DSL (Domestic Substances List)

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

Listed on the Canadian DSL (Domestic Substances List)

### **EU-Regulations**

No additional information available

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#### **National regulations**

### **ALDEHYDE C8 (124-13-0)**

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)

#### ALDEHYDE C 10 (112-31-2)

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

### CITRAL (5392-40-5)

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)

### 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

### **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)

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

### **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)

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

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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)

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

#### 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)

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

### p-Cymene (99-87-6)

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

### 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

### Terpinolene (586-62-9)

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

Listed on INSQ (Mexican National Inventory of Chemical Substances)

### **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

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

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### Full text of H-phrases:

<u> </u>	
H226	Flammable liquid and vapor
H227	Combustible liquid
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child

### 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.

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