

## Safety Data Sheet

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

Version: 3.0

Issue date: 05/17/2019 Revision date: 01/24/2023 Supersedes: 01/24/2023

## **SECTION 1: Identification**

1.1. Identification

Product form : Mixture

Product name : SENSAMIST MOUNTAIN AIR

CAS-No. : MIXTURE

Product code : SM-32-MOUNTN-AIR

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

No additional information available

#### 1.3. Supplier

Vectair Systems Inc.

2095 Spicer Cove, Covington Way Distribution Centre, Memphis, TN 38134, USA

Vectair Systems Inc +1 901 373 7818 (during normal office hours)

Product Development: info@vectairsystems.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

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

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

smokina.

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.

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.

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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
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone	(CAS-No.) 54464-57-2	5 – 10	Skin Irrit. 2, H315 Skin Sens. 1B, H317
LINALYL ACETATE	(CAS-No.) 115-95-7	1 – 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
PHENYL ETHYL ALCOHOL	(CAS-No.) 60-12-8	1 – 5	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 4 (Inhalation:dust,mist), H332 Eye Irrit. 2, H319
DIETHYL MALONATE	(CAS-No.) 105-53-3	1 – 5	Flam. Liq. 4, H227 Eye Irrit. 2, H319
LIMONENE	(CAS-No.) 5989-27-5	1 – 5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304
2-Ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	(CAS-No.) 28219-61-6	1 – 5	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
GERANIOL	(CAS-No.) 106-24-1	< 0.5	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317

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

## **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 : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs:

Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

# 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.

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## 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

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. 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.

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

## 8.1. Control parameters

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

Not applicable

## Linalool (78-70-6)

Not applicable

## LINALYL ACETATE (115-95-7)

Not applicable

## PHENYL ETHYL ALCOHOL (60-12-8)

Not applicable

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

Not applicable

## **ETHYL TRIMETHYLCYCLOPENTENE BUTENOL (28219-61-6)**

Not applicable

## **DIETHYL MALONATE (105-53-3)**

Not applicable

## 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone (54464-57-2)

Not applicable

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#### 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):



Oxidizing properties





## **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 Colourless White Light yellow to colourless On exposure to light: yellow Yellow Colourless to yellow Colourless to 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: Pleasant odour Sweet odour Mild odour Fruity odour Floral odour Aromatic odour

Irritating/pungent odour Strong odour Characteristic odour Almost odourless Alcohol odour

Lemon odour Peppermint odour Phenol odour Pine odour

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

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: No data available

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#### 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

LD50 oral rat

#### 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

GERANIOL (106-24-1)	
LD50 oral rat	3600 mg/kg body weight (Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Experimental value, Dermal)
ATE US (oral)	3600 mg/kg body weight

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 value, Dermal, 7 day(s))
ATE US (oral)	2790 mg/kg body weight
ATE US (dermal)	5610 mg/kg body weight

PHENYL ETHYL ALCOHOL (60-12-8)	
LD50 oral rat	> 1790 mg/kg (Rat, Oral)
LD50 dermal rabbit	> 808 mg/kg (Rabbit, Dermal)
LC50 Inhalation - Rat	> 1.4 mg/l (4 h, Rat, Inhalation)
ATE US (oral)	1610 mg/kg body weight
ATE US (dermal)	300 mg/kg body weight
ATE US (dust. mist)	1.5 mg/l/4h

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)

ETHYL TRIMETHYLCYCLOPENTENE BUTENOL (28219-61-6)	
LD50 oral rat	> 2000 mg/kg body weight (OECD 401: Acute Oral Toxicity, 2 week(s), Rat, Male/female, Experimental value, Oral)
LD50 dermal rat	> 5 ml/kg (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male/female, Experimental value, Dermal)
DIETHYL MALONATE (105-53-3)	

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15794 mg/kg (Rat, Oral)

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DIETHYL MALONATE (105-53-3)	
LD50 dermal rabbit	> 16960 mg/kg (Rabbit, Dermal)
ATE US (oral)	15794 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-LIMONENE (5989-27-5)	
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
Tro i dingle expedite	. Not stassified
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)
	Toxiotty. 30-Day Gudy)
Aspiration hazard	: Not classified
/iscosity, kinematic	: No data available
•	
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.
SECTION 12: Ecological informati	ion
	ion
12.1. Toxicity	The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
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Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse
12.1. Toxicity Ecology - general  GERANIOL (106-24-1)	The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.  22 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water,
I2.1. Toxicity Ecology - general  GERANIOL (106-24-1)  LC50 - Fish [1]	The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.  22 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water, Experimental value, GLP)  10.8 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static
12.1. Toxicity Ecology - general  GERANIOL (106-24-1) LC50 - Fish [1]  EC50 - Crustacea [1]	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.  22 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water, Experimental value, GLP)  10.8 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)  13.1 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static
I2.1. Toxicity Ecology - general  GERANIOL (106-24-1) LC50 - Fish [1]  EC50 - Crustacea [1]  ErC50 algae	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.  22 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water, Experimental value, GLP)  10.8 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)  13.1 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static
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### Toxicity    Cology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.  22 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water, Experimental value, GLP)  10.8 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)  13.1 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)  27.8 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, GLP)  59 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)  156.7 mg/l (DIN 38412-9, 96 h, Desmodesmus subspicatus, Static system, Fresh water,
### Toxicity  ### Ecology - general    GERANIOL (106-24-1)	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.  22 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water, Experimental value, GLP)  10.8 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)  13.1 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)  27.8 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, GLP)  59 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)  156.7 mg/l (DIN 38412-9, 96 h, Desmodesmus subspicatus, Static system, Fresh water,
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GERANIOL (106-24-1) LC50 - Fish [1] EC50 - Crustacea [1] ErC50 algae Linalool (78-70-6) LC50 - Fish [1] EC50 - Crustacea [1] ErC50 algae Linalool (78-70-6) LC50 - Fish [1] EC50 - Crustacea [1] ErC50 algae LINALYL ACETATE (115-95-7) LC50 - Fish [1] EC50 - Crustacea [1] PHENYL ETHYL ALCOHOL (60-12-8)	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.  22 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water, Experimental value, GLP)  10.8 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)  13.1 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)  27.8 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, GLP)  59 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)  156.7 mg/l (DIN 38412-9, 96 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)  11 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Cyprinus carpio)  15 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna)
GERANIOL (106-24-1) LC50 - Fish [1] EC50 - Crustacea [1] ErC50 algae Linalool (78-70-6) LC50 - Fish [1] EC50 - Crustacea [1] ErC50 algae Linalool (78-70-6) LC50 - Fish [1] EC50 - Crustacea [1] ErC50 algae LINALYL ACETATE (115-95-7) LC50 - Fish [1] EC50 - Crustacea [1] PHENYL ETHYL ALCOHOL (60-12-8) LC50 - Fish [1]	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.  22 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water, Experimental value, GLP)  10.8 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)  13.1 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)  27.8 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, GLP)  59 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)  156.7 mg/l (DIN 38412-9, 96 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)  11 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Cyprinus carpio)  15 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna)

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D-LIMONENE (5989-27-5)		
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)	
ETHYL TRIMETHYLCYCLOPENTENE BUTENO	DL (28219-61-6)	
LC50 - Fish [1]	1.1 mg/l (US EPA, 96 h, Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, GLP)	
ErC50 algae	2.5 mg/l (US EPA, 96 h, Selenastrum capricornutum, Static system, Fresh water, Experimental value, GLP)	
DIETHYL MALONATE (105-53-3)		
LC50 - Fish [1]	11.8 mg/l (96 h, Pimephales promelas)	
EC50 - Crustacea [1]	202.3 mg/l (48 h, Daphnia magna, Static system)	

# 12.2. Persistence and degradability

GERANIOL (106-24-1)			
Persistence and degradability	Readily biodegradable in water.		
Linalool (78-70-6)			
Persistence and degradability	Readily biodegradable in water.		
LINALYL ACETATE (115-95-7)			
Persistence and degradability	Readily biodegradable in water.		
PHENYL ETHYL ALCOHOL (60-12-8)	PHENYL ETHYL ALCOHOL (60-12-8)		
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.		
Biochemical oxygen demand (BOD)	1.45 g O <sub>2</sub> /g substance		
Chemical oxygen demand (COD)	2.5 g O <sub>2</sub> /g substance		
ThOD	2.6 g O <sub>2</sub> /g substance		
BOD (% of ThOD)	0.558		
D-LIMONENE (5989-27-5)			
Persistence and degradability	Readily biodegradable in water.		
ThOD	3.29 g O <sub>2</sub> /g substance		
ETHYL TRIMETHYLCYCLOPENTENE BUTENOL (28219-61-6)			
Persistence and degradability	Not readily biodegradable in water.		
ThOD	3 g O₂/g substance		
DIETHYL MALONATE (105-53-3)			
Persistence and degradability	Readily biodegradable in water.		

# 12.3. Bioaccumulative potential

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).	
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).	
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).	
PHENYL ETHYL ALCOHOL (60-12-8)		
Partition coefficient n-octanol/water (Log Pow)	1.38 (Experimental value)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
D-LIMONENE (5989-27-5)		
BCF - Fish [1]	864.8 – 1022 (Pisces, QSAR, Fresh weight)	
Partition coefficient n-octanol/water (Log Pow)	4.38 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 37 °C)	
Bioaccumulative potential	Potential for bioaccumulation (4 ≥ Log Kow ≤ 5).	

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ETHYL TRIMETHYLCYCLOPENTENE BUTENOL (28219-61-6)		
BCF - Other aquatic organisms [1]	667 (Other, QSAR)	
Partition coefficient n-octanol/water (Log Pow)	4.4 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 35 °C)	
Bioaccumulative potential	Potential for bioaccumulation (500 ≤ BCF ≤ 5000).	
DIETHYL MALONATE (105-53-3)		
Partition coefficient n-octanol/water (Log Pow)	0.96	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	

## 12.4. Mobility in soil

GERANIOL (106-24-1)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.85 (log Koc, PCKOCWIN v1.66, Calculated value)	
Ecology - soil	Highly mobile in soil.	
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.	
LINALYL ACETATE (115-95-7)		
Ecology - soil	Adsorbs into the soil.	
D-LIMONENE (5989-27-5)		
Ecology - soil	Adsorbs into the soil.	
ETHYL TRIMETHYLCYCLOPENTENE BUTENOL (28219-61-6)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.57 (log Koc, Other, QSAR)	
Ecology - soil	Low potential for adsorption in soil.	
DIETHYL MALONATE (105-53-3)		
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.	

## 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. (1,3,4,6,7,8-

 $Hexahydro-4,6,6,7,8,8-hexamethylcyclopenta-gamma-2-benzopyran\ ;\ 1-(1,2,3,4,5,6,7,8-1)-(1,2,3,4,5,7,8-1)-(1,2,3$ 

Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone), 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** 

Transport by sea

Transport document description (IMDG)

: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylcyclopenta-gamma-2-benzopyran; 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone), 9, III, MARINE POLLUTANT

UN-No. (IMDG)

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

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

: 5 L

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. (1,3,4,6,7,8-Hexahydro-

4,6,6,7,8,8-hexamethylcyclopenta-gamma-2-benzopyran; 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-

tetramethyl-2-naphthalenyl)ethanone), 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 - Low 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

GERANIOL	CAS-No. 106-24-1	< 0.5%
LINALOOL	CAS-No. 78-70-6	1 – 5%
LINALYL ACETATE	CAS-No. 115-95-7	1 – 5%
PHENYL ETHYL ALCOHOL	CAS-No. 60-12-8	1 – 5%
LIMONENE	CAS-No. 5989-27-5	1 – 5%
2-Ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	CAS-No. 28219-61-6	1 – 5%
DIETHYL MALONATE	CAS-No. 105-53-3	1 – 5%
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone	CAS-No. 54464-57-2	5 – 10%

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

1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylcyclopenta-	CAS-No. 1222-05-5	5 – 10%
gamma-2-benzopyran		

## 15.2. International regulations

#### **CANADA**

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

Listed on the Canadian DSL (Domestic Substances List)

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

Listed on the Canadian DSL (Domestic Substances List)

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

Listed on the Canadian DSL (Domestic Substances List)

## PHENYL ETHYL ALCOHOL (60-12-8)

Listed on the Canadian DSL (Domestic Substances List)

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

Listed on the Canadian DSL (Domestic Substances List)

#### **ETHYL TRIMETHYLCYCLOPENTENE BUTENOL (28219-61-6)**

Listed on the Canadian DSL (Domestic Substances List)

## **DIETHYL MALONATE (105-53-3)**

Listed on the Canadian DSL (Domestic Substances List)

## 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone (54464-57-2)

Listed on the Canadian DSL (Domestic Substances List)

## **EU-Regulations**

No additional information available

## **National regulations**

# **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

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

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#### 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)

### 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)

## PHENYL ETHYL ALCOHOL (60-12-8)

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

Listed on INSQ (Mexican National Inventory of Chemical Substances)

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)

## **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)

## ETHYL TRIMETHYLCYCLOPENTENE BUTENOL (28219-61-6)

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 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 the Japanese ENCS (Existing New Chemical Substances) inventory

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Listed on KECI (Korean Existing Chemicals Inventory)

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## **DIETHYL MALONATE (105-53-3)**

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)

## 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone (54464-57-2)

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)

## **SECTION 16: Other information**

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Revision date : 01/24/2023

#### Full text of H-phrases:

H226	Flammable liquid and vapor
H227	Combustible liquid
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
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
H332	Harmful if inhaled

## SDS US (Vectair Systems Inc)

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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