

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015) Issue date:

09/20/2024 Version: 1.0

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture

Product name : SensaMist Balsam Fir 32oz

CAS-No. : MIXTURE

Product code : SM-32 BALSAM FIR

Product group : Formula

1.2. Recommended use and restrictions on use

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 identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Flammable liquids H227 Combustible liquid

Category 4

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 CA labeling

Hazard pictograms (GHS CA)



Signal word (GHS CA) : Warning

Hazard statements (GHS CA) : H227 - Combustible liquid

H317 - May cause an allergic skin reaction

Precautionary statements (GHS CA) : 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.

P272 - Contaminated work clothing should 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.

P321 - Specific treatment (see supplemental first aid instruction on this label). P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P370+P378 - In case of fire: Use media other than water to extinguish.

P403 - Store in a well-ventilated place.

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

No additional information available

2.4. Unknown acute toxicity (GHS CA)

No data available

09/20/2024 EN (English US) Page 1

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
DIETHYL MALONATE	carbethoxy acetic ester / dicarbethoxymethane / diethyl malonate / diethylpropanedioate / ethylmalonate / malonic acid diethyl ester / malonic ester / methane dicarboxylic acid diethyl ester / propanedioic acid diethyl ester / propanedioic acid, diethyl ester	(CAS-No.) 105-53-3	5 – 10	Flam. Liq. 4, H227 Eye Irrit. 2, H319
ALPHA PINENE	2,6,6-trimethylbicyclo-(3,1,1)-2-heptene / 2,6,6-trimethylbicyclo(3.1.1)-2-hept-2-ene / 2,6,6-trimethylbicyclo(3.1.1)-2-heptene / 2,6,6-trimethyldicyclo(3.1.1)-2-heptene / 2-pinene / acintene A / alpha-pinene (FCC) / australene / bicyclo(3.1.1)hept-2-ene, 2,6,6-trimethyl- / FEMA No 2902 / pin-2(3)-ene / pinen alpha / pinene (=alpha-pinene) / pinene, pract. (=alpha-pinene)	(CAS-No.) 80-56-8	5 – 10	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304
beta-Pinene	beta-Pinene 2(10)-pinene / 6,6-dimethyl-2- methylenebicyclo(3.1.1)heptane / beta-pinene / beta-pinene(FCC) / bicyclo[3.1.1]heptane, 6,6-dimethyl- 2-methylene- / FEMA No 2903 / nopinen / nopinene / PC 600 / pin- 2(10)-ene / pseudopinen / pseudo- pinen / pseudopinene / pseudo- pinene / terebenthene(=beta-pinene)	(CAS-No.) 127-91-3	1-5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304
DELTA-3-CARENE		(CAS-No.) 13466-78-9	< 0.5	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304
delta-3-Carene		(CAS-No.) 13466-78-9	< 0.5	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304
LIMONENE	LIMONENE (+)-1-methyl-4-isopropenyl-1- cyclohexene / (+)-4-isopropenyl-1- methylcyclohexene / (+)-cajeputene / (+)-carvene / (+)-citrene / (+)-para- mentha-1,8-diene / (+)-p-mentha- 1,8-diene / (+)-R-limonene / (R)-(+)- 4-isopropenyl-1-methyl-1- cyclohexene / (R)-(+)-limonene / (R)- 1-methyl-4-(1- methylethenyl)cyclohexene / (R)-4- isopropenyl-1-methyl-1-cyclohexene / (R)-p-mentha-1,8-diene / 1,8- menthadiene, D- / 1-methyl-4-(1- methylethenyl)cyclohexene, (R)- / cyclohexene, 1-methyl-4-(1- methylethenyl)-, (R)- / cyclohexene, 1-methyl-4-(1-methylethenyl)-, (theta)- / cyclohexene, 4- isopropenyl-1-methyl- / D-(+)- limonene / dextro-limonene / dextro- para-mentha-1,8-diene / d-limonene / D-para-mentha-1,8-diene / D-p- mentha-1,8-diene / limonene, dextro- / para-mentha-1,8-diene, (R)- (+)- / limonene, D-(+)- / limonene, dextro- / para-mentha-1,8-diene, (R)- (+)- / p-mentha-1,8-diene, (R)-(+)- / p-mentha-1,8-diene, (R)-(+)-(+)- / p-mentha-1,8-diene, (R)-(+)-(+)-(+)-(+)-(+)-(+)-(+)-(+)-(+)-(+	(CAS-No.) 5989-27-5	< 0.5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304

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

09/20/2024 EN (English US) 2/11

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

SECTION 4: First-aid measures

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 eve contact Rinse eyes with water as a precaution.

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

First-aid measures general : If you feel unwell, seek medical advice.

Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : Although no appropriate human or animal health effects data are known to exist, this material is

expected to be an inhalation hazard.

Symptoms/effects after skin contact : May cause an allergic skin reaction. Symptoms/effects after eye contact : None under normal conditions. Symptoms/effects after ingestion : None under normal conditions.

Immediate medical attention and special treatment, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media

Unsuitable extinguishing media : Do not use a heavy water stream.

5.3. Specific hazards arising from the hazardous product

Fire hazard : Combustible liquid.

Explosion hazard : No direct explosion hazard.

Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper

protective equipment, including respiratory protection.

Protection during firefighting Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

: Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb General measures

spillage to prevent material-damage.

Methods and materials for containment and cleaning up

: Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to For containment

prevent migration and entry into sewers or streams. Stop leak, if possible without risk.

Methods for cleaning up Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public

Other information Dispose of materials or solid residues at an authorized site.

Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

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.

Contaminated work clothing should not be allowed out of the workplace. Wash contaminated Hygiene measures

clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands

after handling the product.

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

Conditions for safe storage, including any incompatibilities

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

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

Packaging materials : Store always product in container of same material as original container.

09/20/2024 EN (English US) 3/11

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

British Columbia CITRAL (5392-40-5) USA - ACGIH USA - ACGIH USA - ACGIH Manitoba Manitoba Manitoba New Brunswick New Brunswick	Notations and remarks Regulatory reference ACGIH OEL TWA Remark (ACGIH) Regulatory reference OEL TWA Notations and remarks Regulatory reference OEL TWA Notations and remarks	IARC group 2B carcinogen OHS Guidelines Part 5: Chemical Agents and Biological Agents (WorkSafe BC) 5 ppm (IFV - Inhalable fraction and vapor) TLV® Basis: Body weight eff; URT irr; eye dam. Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen) ACGIH 2024 5 ppm (IFV - Inhalable fraction and vapor) TLV® Basis: Body weight eff; URT irr; eye dam. Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen) ACGIH 2024 5 ppm
British Columbia British Columbia CITRAL (5392-40-5) USA - ACGIH USA - ACGIH USA - ACGIH Manitoba Manitoba Manitoba New Brunswick New Brunswick	Regulatory reference ACGIH OEL TWA Remark (ACGIH) Regulatory reference OEL TWA Notations and remarks Regulatory reference OEL TWA	OHS Guidelines Part 5: Chemical Agents and Biological Agents (WorkSafe BC) 5 ppm (IFV - Inhalable fraction and vapor) TLV® Basis: Body weight eff; URT irr; eye dam. Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen) ACGIH 2024 5 ppm (IFV - Inhalable fraction and vapor) TLV® Basis: Body weight eff; URT irr; eye dam. Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen) ACGIH 2024
British Columbia CITRAL (5392-40-5) USA - ACGIH USA - ACGIH USA - ACGIH Manitoba Manitoba Manitoba New Brunswick New Brunswick	Regulatory reference ACGIH OEL TWA Remark (ACGIH) Regulatory reference OEL TWA Notations and remarks Regulatory reference OEL TWA	OHS Guidelines Part 5: Chemical Agents and Biological Agents (WorkSafe BC) 5 ppm (IFV - Inhalable fraction and vapor) TLV® Basis: Body weight eff; URT irr; eye dam. Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen) ACGIH 2024 5 ppm (IFV - Inhalable fraction and vapor) TLV® Basis: Body weight eff; URT irr; eye dam. Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen) ACGIH 2024
USA - ACGIH USA - ACGIH USA - ACGIH Manitoba Manitoba Menitoba New Brunswick New Brunswick	ACGIH OEL TWA Remark (ACGIH) Regulatory reference OEL TWA Notations and remarks Regulatory reference OEL TWA	Biological Agents (WorkSafe BC) 5 ppm (IFV - Inhalable fraction and vapor) TLV® Basis: Body weight eff; URT irr; eye dam. Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen) ACGIH 2024 5 ppm (IFV - Inhalable fraction and vapor) TLV® Basis: Body weight eff; URT irr; eye dam. Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen) ACGIH 2024
USA - ACGIH USA - ACGIH USA - ACGIH Manitoba Manitoba Manitoba New Brunswick New Brunswick	Remark (ACGIH) Regulatory reference OEL TWA Notations and remarks Regulatory reference OEL TWA	TLV® Basis: Body weight eff; URT irr; eye dam. Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen) ACGIH 2024 5 ppm (IFV - Inhalable fraction and vapor) TLV® Basis: Body weight eff; URT irr; eye dam. Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen) ACGIH 2024
USA - ACGIH USA - ACGIH Manitoba Manitoba Manitoba New Brunswick New Brunswick	Remark (ACGIH) Regulatory reference OEL TWA Notations and remarks Regulatory reference OEL TWA	TLV® Basis: Body weight eff; URT irr; eye dam. Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen) ACGIH 2024 5 ppm (IFV - Inhalable fraction and vapor) TLV® Basis: Body weight eff; URT irr; eye dam. Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen) ACGIH 2024
USA - ACGIH Manitoba Manitoba Manitoba New Brunswick New Brunswick	Regulatory reference OEL TWA Notations and remarks Regulatory reference OEL TWA	Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen) ACGIH 2024 5 ppm (IFV - Inhalable fraction and vapor) TLV® Basis: Body weight eff; URT irr; eye dam. Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen) ACGIH 2024
Manitoba Manitoba Manitoba New Brunswick New Brunswick	OEL TWA Notations and remarks Regulatory reference OEL TWA	5 ppm (IFV - Inhalable fraction and vapor) TLV® Basis: Body weight eff; URT irr; eye dam. Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen) ACGIH 2024
Manitoba Manitoba New Brunswick New Brunswick	Notations and remarks Regulatory reference OEL TWA	TLV® Basis: Body weight eff; URT irr; eye dam. Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen) ACGIH 2024
Manitoba New Brunswick New Brunswick	Regulatory reference OEL TWA	Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen) ACGIH 2024
New Brunswick New Brunswick	OEL TWA	
New Brunswick		5 nnm
	Notations and remarks	o bbiii
		Body weight eff; URT irr; eye dam; Skin; DSEN; A4
Newfoundland & Labrador	OEL TWA	5 ppm (IFV - Inhalable fraction and vapor)
Newfoundland & Labrador	Notations and remarks	TLV® Basis: Body weight eff; URT irr; eye dam. Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen)
Newfoundland & Labrador	Regulatory reference	ACGIH 2024
Nova Scotia	OEL TWA	5 ppm (IFV - Inhalable fraction and vapor)
Nova Scotia	Notations and remarks	TLV® Basis: Body weight eff; URT irr; eye dam. Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen)
Nova Scotia	Regulatory reference	ACGIH 2024
Ontario	OEL TWAEV	5 ppm (IFV - Inhalable fraction and vapour)
Ontario	Notations and remarks	Skin
Ontario	Regulatory reference	Ontario Occuational Exposure Limits under Regulation 833
Prince Edward Island	OEL TWA	5 ppm (IFV - Inhalable fraction and vapor)
Prince Edward Island	Notations and remarks	TLV® Basis: Body weight eff; URT irr; eye dam. Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen)
Prince Edward Island	Regulatory reference	ACGIH 2024
ALPHA PINENE (80-56-8)		
Saskatchewan	OEL STEL	30 ppm
Saskatchewan	OEL TWA	20 ppm
Saskatchewan	Notations and remarks	SEN
Saskatchewan	Regulatory reference	The Occupational Health and Safety Regulations, 2020. Chapter S-15.1 Reg 10
beta-Pinene (127-91-3)		
Saskatchewan	OEL STEL	30 ppm
Saskatchewan	OEL TWA	20 ppm
Saskatchewan	Notations and remarks	SEN
Saskatchewan	Regulatory reference	The Occupational Health and Safety Regulations, 2020. Chapter S-15.1 Reg 10
1,7,7-Trimethylbicyclo[2.2.1]h		
USA - ACGIH	ACGIH OEL TWA	2 ppm
USA - ACGIH	ACGIH OEL STEL	3 ppm
	Remark (ACGIH)	TLV® Basis: Eye & URT irr; anosmia. Notations: A4 (Not classifiable as a Human Carcinogen)
USA - ACGIH	Regulatory reference	ACGIH 2024

09/20/2024 EN (English US) 4/11

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

1,7,7-Trimethylbicyclo[2.2.1] USA - OSHA	110ptail = 0110 (10 == =)	
	OSHA PEL TWA	2 mg/m³
USA - OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
Alberta	OEL STEL	19 mg/m³
Alberta	OEL STEL	3 ppm
Alberta	OEL TWA	12 mg/m³
Alberta	OEL TWA	-
		2 ppm
Alberta	Regulatory reference	Alberta Regulation 191/2021
Manitoba	OEL STEL	3 ppm
Manitoba	OEL TWA	2 ppm
Manitoba	Notations and remarks	TLV® Basis: Eye & URT irr; anosmia. Notations: A4 (Not classifiable as a Human Carcinogen)
Manitoba	Regulatory reference	ACGIH 2024
New Brunswick	OEL STEL	3 ppm
New Brunswick	OEL TWA	2 ppm
New Brunswick	Notations and remarks	Eye & URT irr; anosmia
Newfoundland & Labrador	OEL STEL	3 ppm
Newfoundland & Labrador	OEL TWA	2 ppm
Newfoundland & Labrador	Notations and remarks	TLV® Basis: Eye & URT irr; anosmia. Notations: A4 (Not classifiable as a Human Carcinogen)
Newfoundland & Labrador	Regulatory reference	ACGIH 2024
Nova Scotia	OEL STEL	3 ppm
Nova Scotia	OEL TWA	2 ppm
Nova Scotia	Notations and remarks	TLV® Basis: Eye & URT irr; anosmia. Notations: A4 (Not classifiable as a Human Carcinogen)
Nova Scotia	Regulatory reference	ACGIH 2024
Nunavut	OEL STEL	3 ppm
Nunavut	OEL TWA	2 ppm
Nunavut	Regulatory reference	Occupational Health and Safety Regulations, Nu Reg 003-2016 (Amendment R-044-2021)
Northwest Territories	OEL STEL	3 ppm
Northwest Territories	OEL TWA	2 ppm
Northwest Territories	Regulatory reference	Occupation Health and Safety Regulations R-039- 2015 (R-013-2020)
Ontario	OEL TWAEV	3 ppm
Ontario	OEL TWAEV	2 ppm
Ontario	Regulatory reference	Ontario Occuational Exposure Limits under Regulation
Prince Edward Island	OEL STEL	833 3 ppm
Prince Edward Island	OEL TWA	2 ppm
Prince Edward Island	Notations and remarks	TLV® Basis: Eye & URT irr; anosmia. Notations: A4
Prince Edward Island	Regulatory reference	(Not classifiable as a Human Carcinogen) ACGIH 2024
DELTA-3-CARENE (13466-78	3-9)	<u>'</u>
USA - ACGIH	ACGIH OEL TWA	20 ppm
USA - ACGIH	Remark (ACGIH)	TLV® Basis: Lung irr. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen)
USA - ACGIH	Regulatory reference	ACGIH 2024
Alberta	OEL TWA	111 mg/m³
Alberta	OEL TWA	
		20 ppm
	Notations and remarks	Occupational exposure limit is based on irritation
Alberta		effects and its adjustment to compensate for unusual work schedules is not required.
Alberta	Regulatory reference	

09/20/2024 EN (English US) 5/11

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

DELTA-3-CARENE (13466-	-78-9)	
British Columbia	Notations and remarks	S(D) (dermal sensitization)
British Columbia	Regulatory reference	OHS Guidelines Part 5: Chemical Agents and Biological Agents (WorkSafe BC)
New Brunswick	OEL TWA	20 ppm
Nunavut	OEL STEL	30 ppm
Nunavut	OEL TWA	20 ppm
Nunavut	Notations and remarks	SEN
Nunavut	Regulatory reference	Occupational Health and Safety Regulations, Nu Reg 003-2016 (Amendment R-044-2021)
Northwest Territories	OEL STEL	30 ppm
Northwest Territories	OEL TWA	20 ppm
Northwest Territories	Notations and remarks	SEN
Northwest Territories	Regulatory reference	Occupation Health and Safety Regulations R-039-2015 (R-013-2020)
Saskatchewan	OEL STEL	30 ppm
Saskatchewan	OEL TWA	20 ppm
Saskatchewan	Notations and remarks	SEN
Saskatchewan	Regulatory reference	The Occupational Health and Safety Regulations, 2020. Chapter S-15.1 Reg 10
DIPROPYLENE GLYCOL N	METHYLETHER ACETATE (88917-22-0)	
Ontario	OEL TWAEV	1164 mg/m³
Ontario	OEL TWAEV	150 ppm
Ontario	OEL TWAEV	776 mg/m³
Ontario	OEL TWAEV	100 ppm
Ontario	Regulatory reference	Ontario Occuational Exposure Limits under Regulation 833

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

Individual protection measures/Personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):







SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state : Liquid

Appearance : No data available

EN (English US) 09/20/2024 6/11

Safety Data Sheet

Odor threshold

according to the Hazardous Products Regulation (WHMIS 2015)

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

Colourless to light yellow Colourless White Colourless to white

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 Floral odour Lemon odour Mild odour Almost odourless Alcohol odour Sweet odour Characteristic odour Peppermint odour Pine odour Camphor odour Fruity odour

: No data available

pH : No data available Relative evaporation rate (butyl acetate=1) : No data available

Relative evaporation rate (ether=1) : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : No data available

Flash point : ≈ 62.9 °C

No data available Auto-ignition temperature No data available Decomposition temperature Flammability : Not applicable Vapor pressure : No data available Vapor pressure at 50°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 **Explosion limits**

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

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

None under recommended storage and handling conditions (see section 7).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

D-LIMONENE (5989-27-5)	
` '	
LD50 oral rat	> 2000 mg/kg body weight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Read-across, Oral)
LD50 dermal rabbit	> 5000 mg/kg body weight (Equivalent or similar to OECD 402, Rabbit, Weight of evidence, Dermal)
ALPHA PINENE (80-56-8)	
LD50 oral rat	3700 mg/kg (Rat, Male, Weight of evidence, Oral)
LD50 oral	500 mg/kg body weight
LD50 dermal rabbit	> 5000 mg/kg (24 h, Rabbit, Weight of evidence, Dermal)
ATE CA (oral)	500 mg/kg body weight
BETA PINENE (127-91-3)	
LD50 oral rat	4700 mg/kg (Rat, Oral)
ATE CA (oral)	4700 mg/kg body weight
DELTA-3-CARENE (13466-78-9)	
LD50 oral	4800 mg/kg body weight
LC50 Inhalation - Rat (Dust/Mist)	1.5 mg/l/4h
ATE CA (oral)	4800 mg/kg body weight
ATE CA (Gases)	4500 ppmV/4h
ATE CA (vapors)	11 mg/l/4h
ATE CA (dust,mist)	1.5 mg/l/4h

09/20/2024 EN (English US) 7/11

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

DIETHYL MALONATE (105-53-3)	
LD50 oral rat	15794 mg/kg (Rat, Oral)
LD50 dermal rabbit	> 16960 mg/kg (Rabbit, Dermal)
ATE CA (oral)	15794 mg/kg body weight
delta-3-Carene (13466-78-9)	
LD50 oral	4800 mg/kg body weight
LC50 Inhalation - Rat (Dust/Mist)	1.5 mg/l/4h
ATE CA (oral)	4800 mg/kg body weight
ATE CA (Gases)	4500 ppmV/4h
ATE CA (vapors)	11 mg/l/4h
ATE CA (dust,mist)	1.5 mg/l/4h
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
	: Not classified
STOT-repeated exposure	
Aspiration hazard	: Not classified
Symptoms/effects after inhalation	: Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact	: May cause an allergic skin reaction.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/effects after ingestion	: None under normal conditions.

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.

Hazardous to the aquatic environment, short-

term (acute)

: Not classified

Hazardous to the aquatic environment, long-

term (chronic)

: Not classified

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)
EC50 72h - Algae [1]	150 mg/l (OECD 201: Alga, Growth Inhibition Test, Desmodesmus subspicatus, Static system, Fresh water, Read-across, GLP)
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)

ALPHA PINENE (80-56-8)		
BCF - Fish [1]	718 (Pimephales promelas, QSAR)	
Partition coefficient n-octanol/water (Log Pow)	4.487 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)	

BETA PINENE (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, GLP)
EC50 - Crustacea [1]	1.248 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Semistatic system, Fresh water, Weight of evidence, GLP)

EN (English US) 09/20/2024 8/11

Safety Data Sheet

Ecology - soil

Ecology - soil

09/20/2024

BETA PINENE (127-91-3)

Partition coefficient n-octanol/water (Log Pow)

BETA PINENE (127-91-3)	
ErC50 algae	0.826 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Weight of evidence, GLP)
BCF - Other aquatic organisms [1]	1125 (BCFBAF v3.00, Fresh water, QSAR, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	4.425 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.01 – 3.82 (log Koc, Calculated value)
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)
EC50 72h - Algae [1]	508.2 mg/l (Scenedesmus subspicatus)
Partition coefficient n-octanol/water (Log Pow)	0.96
2.2. Persistence and degradability	
D-LIMONENE (5989-27-5)	
Persistence and degradability	Readily biodegradable in water.
ThOD	3.29 g O ₂ /g substance
ALPHA PINENE (80-56-8)	
Persistence and degradability	Readily biodegradable in water.
BETA PINENE (127-91-3)	
Persistence and degradability	Readily biodegradable in water.
DIETHYL MALONATE (105-53-3)	
Persistence and degradability	Readily biodegradable in water.
2.3. Bioaccumulative potential	
D-LIMONENE (5989-27-5)	
Bioaccumulative potential	Potential for bioaccumulation (4 ≥ Log Kow ≤ 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)
ALPHA PINENE (80-56-8)	
Bioaccumulative potential	Potential for bioaccumulation (500 ≤ BCF ≤ 5000).
BCF - Fish [1]	718 (Pimephales promelas, QSAR)
Partition coefficient n-octanol/water (Log Pow)	4.487 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
BETA PINENE (127-91-3)	
Bioaccumulative potential	Potential for bioaccumulation (500 ≤ BCF ≤ 5000).
BCF - Other aquatic organisms [1]	1125 (BCFBAF v3.00, Fresh water, QSAR, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	4.425 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.01 – 3.82 (log Koc, Calculated value)
DIETHYL MALONATE (105-53-3)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Partition coefficient n-octanol/water (Log Pow)	0.96
2.4. Mobility in soil	
D-LIMONENE (5989-27-5)	
Ecology - soil	Adsorbs into the soil.
Partition coefficient n-octanol/water (Log Pow)	4.38 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 37 °C)
ALPHA PINENE (80-56-8)	

Organic Carbon Normalized Adsorption 3.01 – 3.82 (log Koc, Calculated value) Coefficient (Log Koc)

Low potential for mobility in soil.

EN (English US)

Low potential for adsorption in soil. May be harmful to plant growth, blooming and fruit

4.487 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 $^{\circ}\text{C})$

9/11

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

BETA PINENE (127-91-3)		
Partition coefficient n-octanol/water (Log Pow)	4.425 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)	
DIETHYL MALONATE (105-53-3)		
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.	
Partition coefficient n-octanol/water (Log Pow)	0.96	

12.5. Other adverse effects

Ozone : Not classified

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation : Disposal must be done according to official regulations.

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

Sewage disposal recommendations : Disposal must be done according to official regulations. Product/Packaging disposal recommendations : Disposal must be done according to official regulations.

Additional information : Do not re-use empty containers.

SECTION 14: Transport information

14.1. Basic shipping description

In accordance with TDG

Transportation of Dangerous Goods

Not regulated for transport

14.2. Transport information/DOT

Department of Transport

Not regulated for transport

14.3. Air and sea transport

IMDG

Not regulated for transport

IATA

Not regulated for transport

SECTION 15: Regulatory information

15.1. National regulations

D-LIMONENE (5989-27-5)

Listed on the Canadian DSL (Domestic Substances List)

ALPHA PINENE (80-56-8)

Listed on the Canadian DSL (Domestic Substances List)

BETA PINENE (127-91-3)

Listed on the Canadian DSL (Domestic Substances List)

DELTA-3-CARENE (13466-78-9)

Listed on the Canadian DSL (Domestic Substances List)

DIETHYL MALONATE (105-53-3)

Listed on the Canadian DSL (Domestic Substances List)

delta-3-Carene (13466-78-9)

Listed on the Canadian DSL (Domestic Substances List)

15.2. International regulations

09/20/2024 EN (English US) 10/11

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

D-LIMONENE (5989-27-5)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

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

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

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 introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

ALPHA PINENE (80-56-8)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

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

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

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 introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

BETA PINENE (127-91-3)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

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

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

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 introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

DELTA-3-CARENE (13466-78-9)

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

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

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 INSQ (Mexican National Inventory of Chemical Substances)

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

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

DIETHYL MALONATE (105-53-3)

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

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

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 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)

delta-3-Carene (13466-78-9)

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

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

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 INSQ (Mexican National Inventory of Chemical Substances)

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

SECTION 16: Other information

Issue date : 09/20/2024

Full text of H-phrases:

ion of the prince of	
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
H319	Causes serious eye irritation
H332	Harmful if inhaled

SDS Canada

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.

EN (English US) 11/11 09/20/2024