

# Blackberry Bramble Fragrance

## Safety Data Sheet

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

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : Blackberry Bramble Fragrance

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

No additional information available

#### 1.4. Emergency telephone number

Emergency number : Chemtrec 1-800-424-9300 (ACCT# CCN725182)

### SECTION 2: Hazard(s) identification

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

##### GHS US classification

Flammable liquids, Category 4

Acute toxicity (inhalation:dust,mist) Category 4

Skin sensitisation, Category 1

Combustible liquid

Harmful if inhaled.

May cause an allergic skin reaction.

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labelling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Warning

Hazard statements (GHS US) :

Combustible liquid

May cause an allergic skin reaction.

Harmful if inhaled.

Precautionary statements (GHS US) :

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

Avoid breathing dust/fume/gas/mist/vapours/spray.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves/protective clothing/eye protection/face protection.

If on skin: Wash with plenty of water.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

Call a poison center or doctor if you feel unwell.

Specific treatment (see supplemental first aid instruction on this label).

If skin irritation or rash occurs: Get medical advice/attention.

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Wash contaminated clothing before reuse.  
In case of fire: Use media other than water to extinguish.  
Store in a well-ventilated place. Keep cool.  
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
DPG / Dipropylene Glycol	CAS-No.: 25265-71-8	50-80	Acute Tox. 4 (Inhalation:dust,mist), H332
Hexyl Cinnamic Aldehyde	CAS-No.: 101-86-0	1-5	Skin Sens. 1, H317
Linalool	CAS-No.: 78-70-6	1-5	Flam. Liq. 4, H227 Skin Sens. 1B, H317 Aquatic Acute 3, H402
Raspberry Ketone	CAS-No.: 5471-51-2	1-5	Acute Tox. 4 (Oral), H302
Ethyl Maltol	CAS-No.: 4940-11-8	1-5	Acute Tox. 4 (Oral), H302
Lime Oil	CAS-No.: 8008-26-2	0.1-1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304
Citral	CAS-No.: 5392-40-5	0.1-1	Flam. Liq. 4, H227 Eye Irrit. 2, H319 Skin Sens. 1, H317

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

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.  
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.  
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 eyes with water as a precaution.  
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

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

### 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.  
Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 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 breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

#### 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 : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

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

<b>Blackberry Bramble Fragrance</b>	
No additional information available	
<b>Citral (5392-40-5)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Citral
ACGIH OEL TWA [ppm]	5 ppm (Inhalable fraction and vapor)
Remark (ACGIH)	Body weight eff; URT irr; eye dam; Skin; DSEN; A4 (Not classifiable as a Human Carcinogen: Agents which cause concern that they could be carcinogenic for humans but which cannot be assessed conclusively because of a lack of data. In vitro or animal studies do not provide indications of carcinogenicity which are sufficient to classify the agent into one of the other categories)
Regulatory reference	ACGIH 2018

### 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

<b>Hand protection:</b>
Protective gloves
<b>Eye protection:</b>
Safety glasses
<b>Skin and body protection:</b>
Wear suitable protective clothing
<b>Respiratory protection:</b>
[In case of inadequate ventilation] wear respiratory protection.

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### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Colour	: Mixture contains one or more component(s) which have the following colour(s): Colourless to light yellow Colourless Light yellow Yellow White White to light yellow On exposure to light: discolours Yellow to dark orange Colourless to yellow-green
Odour	: 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 Floral odour Characteristic odour Pleasant odour Strong odour Sweet odour Lemon odour Almost odourless Alcohol odour
Odour threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 145 °F
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising 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.

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### 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) : Harmful if inhaled.

<b>Blackberry Bramble Fragrance</b>	
ATE US (dust,mist)	4.091 mg/l/4h
<b>Linalool (78-70-6)</b>	
LD50 oral rat	2790 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male/female, Experimental value)
LD50 dermal rabbit	5610 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Experimental value)
ATE US (oral)	2790 mg/kg bodyweight
ATE US (dermal)	5610 mg/kg bodyweight
<b>Hexyl Cinnamic Aldehyde (101-86-0)</b>	
LD50 oral rat	3100 mg/kg (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 3000 mg/kg (Equivalent or similar to OECD 402, 24 h, Rabbit, Female, Experimental value, Dermal, 7 day(s))
LC50 Inhalation - Rat	> 5 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s))
ATE US (oral)	3100 mg/kg bodyweight
<b>Raspberry Ketone (5471-51-2)</b>	
LD50 oral rat	1320 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
ATE US (oral)	1320 mg/kg bodyweight
<b>Ethyl Maltol (4940-11-8)</b>	
LD50 oral rat	1150 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
ATE US (oral)	1150 mg/kg bodyweight
<b>Lime Oil (8008-26-2)</b>	
LD50 oral rat	> 5000 mg/kg (Rat, Oral)

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<b>Lime Oil (8008-26-2)</b>	
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Dermal)
<b>Citral (5392-40-5)</b>	
LD50 oral rat	4960 mg/kg (Rat, Oral)
LD50 dermal rat	> 2000 mg/kg (Rat, Dermal)
LD50 dermal rabbit	2250 mg/kg (Rabbit, Dermal)
ATE US (oral)	4960 mg/kg bodyweight
ATE US (dermal)	2250 mg/kg bodyweight
<b>DPG / Dipropylene Glycol (25265-71-8)</b>	
LD50 oral rat	> 5000 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male/female, Experimental value)
LD50 dermal rabbit	> 5010 mg/kg bodyweight (Equivalent or similar to OECD 402, Rabbit, Male/female, Experimental value)
LC50 Inhalation - Rat	2.34 mg/l (Equivalent or similar to OECD 403, Rat, Male/female, Experimental value)
ATE US (vapours)	2.34 mg/l/4h
ATE US (dust,mist)	2.34 mg/l/4h
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after skin contact	: May cause an allergic skin reaction.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

<b>Linalool (78-70-6)</b>	
LC50 - Fish [1]	27.8 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value)
EC50 - Crustacea [1]	59 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)
ErC50 algae	156.7 mg/l (DIN 38412-9, 96 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value)
<b>Hexyl Cinnamic Aldehyde (101-86-0)</b>	
LC50 - Fish [1]	1.7 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Other isomer)

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<b>Hexyl Cinnamic Aldehyde (101-86-0)</b>	
EC50 - Crustacea [1]	0.36 – 0.59 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Flow-through system, Fresh water, Experimental value, Other isomer)
<b>Citral (5392-40-5)</b>	
LC50 - Fish [1]	4.6 – 10 mg/l (96 h, Leuciscus idus, Literature study)
EC50 - Crustacea [1]	7 mg/l (48 h, Daphnia magna, Literature study)
<b>DPG / Dipropylene Glycol (25265-71-8)</b>	
LC50 - Other aquatic organisms [1]	3181 mg/l (Other, 48 h, Xenopus laevis, Fresh water, Experimental value)

### 12.2. Persistence and degradability

<b>Linalool (78-70-6)</b>	
Persistence and degradability	Readily biodegradable in water.
<b>Hexyl Cinnamic Aldehyde (101-86-0)</b>	
Persistence and degradability	Readily biodegradable in water.
<b>Raspberry Ketone (5471-51-2)</b>	
Persistence and degradability	Biodegradability in water: no data available.
<b>Ethyl Maltol (4940-11-8)</b>	
Persistence and degradability	Biodegradability in water: no data available.
<b>Lime Oil (8008-26-2)</b>	
Persistence and degradability	Readily biodegradable in water.
<b>Citral (5392-40-5)</b>	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.556 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.99 g O <sub>2</sub> /g substance
ThOD	2.84 g O <sub>2</sub> /g substance
<b>DPG / Dipropylene Glycol (25265-71-8)</b>	
Persistence and degradability	Readily biodegradable in water.

### 12.3. Bioaccumulative potential

<b>Linalool (78-70-6)</b>	
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).
<b>Hexyl Cinnamic Aldehyde (101-86-0)</b>	
Partition coefficient n-octanol/water (Log Pow)	5.3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 24 °C)
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).
<b>Raspberry Ketone (5471-51-2)</b>	
Bioaccumulative potential	No bioaccumulation data available.



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<b>Ethyl Maltol (4940-11-8)</b>	
Bioaccumulative potential	No bioaccumulation data available.
<b>Lime Oil (8008-26-2)</b>	
Partition coefficient n-octanol/water (Log Pow)	4.38 (QSAR, KOWWIN)
Bioaccumulative potential	Potential for bioaccumulation ( $4 \geq \text{Log Kow} \leq 5$ ).
<b>Citral (5392-40-5)</b>	
BCF - Other aquatic organisms [1]	250 (Estimated value)
Partition coefficient n-octanol/water (Log Pow)	2.76 – 3.45 (Estimated value)
Bioaccumulative potential	Bioaccumable.
<b>DPG / Dipropylene Glycol (25265-71-8)</b>	
Bioaccumulative potential	Bioaccumulation: not applicable.

### 12.4. Mobility in soil

<b>Linalool (78-70-6)</b>	
Surface tension	8.3 mN/m (20 °C)
Ecology - soil	No (test)data on mobility of the substance available.
<b>Hexyl Cinnamic Aldehyde (101-86-0)</b>	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.2 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, Other isomer)
Ecology - soil	Low potential for mobility in soil.
<b>Lime Oil (8008-26-2)</b>	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.145 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Low potential for mobility in soil.
<b>DPG / Dipropylene Glycol (25265-71-8)</b>	
Surface tension	71.4 mN/m (22 °C, 1.01 g/l)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.78 (log Koc, Calculated value)
Ecology - soil	Low potential for adsorption in soil.

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

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

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### SECTION 14: Transport information

#### 14.1. UN number

Not regulated for transport

#### 14.2. UN proper shipping name

Proper Shipping Name (DOT)	: Not applicable
Proper Shipping Name (TDG)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable

#### 14.3. Transport hazard class(es)

##### DOT

Transport hazard class(es) (DOT) : Not applicable

##### TDG

Transport hazard class(es) (TDG) : Not applicable

##### IMDG

Transport hazard class(es) (IMDG) : Not applicable

##### IATA

Transport hazard class(es) (IATA) : Not applicable

#### 14.4. Packing group

Packing group (DOT)	: Not applicable
Packing group (TDG)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable

#### 14.5. Environmental hazards

Other information : No supplementary information available.

#### 14.6. Special precautions for user

##### DOT

No data available

##### TDG

No data available

##### IMDG

No data available

##### IATA

No data available

#### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Linalool	78-70-6	Present	Active	
Hexyl Cinnamic Aldehyde	101-86-0	Present	Active	
Raspberry Ketone	5471-51-2	Present	Active	
Ethyl Maltol	4940-11-8	Present	Active	
Lime Oil	8008-26-2	Present	Active	
Citral	5392-40-5	Present	Active	
DPG / Dipropylene Glycol	25265-71-8	Present	Active	

#### 15.2. International regulations

##### CANADA

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

Listed on the Canadian DSL (Domestic Substances List)

###### Hexyl Cinnamic Aldehyde (101-86-0)

Listed on the Canadian DSL (Domestic Substances List)

###### Raspberry Ketone (5471-51-2)

Listed on the Canadian DSL (Domestic Substances List)

###### Ethyl Maltol (4940-11-8)

Listed on the Canadian DSL (Domestic Substances List)

###### Lime Oil (8008-26-2)

Listed on the Canadian DSL (Domestic Substances List)

###### Citral (5392-40-5)

Listed on the Canadian DSL (Domestic Substances List)

###### DPG / Dipropylene Glycol (25265-71-8)

Listed on the Canadian DSL (Domestic Substances List)

##### EU-Regulations

No additional information available

##### National regulations

No additional information available

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### 15.3. US State regulations

Component	State or local regulations
DPG / Dipropylene Glycol(25265-71-8)	U.S. - Pennsylvania - RTK (Right to Know) List

### SECTION 16: Other information

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Safety Data Sheet (SDS), USA

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.