

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
 Product name : BLACKBERRY SOLVENT FREE TERPENE FLAVOR  
 CAS-No. : N/A  
 Product code : TPBL80

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

No additional information available

#### 1.3. Supplier

EXTRACT CONSULTANTS  
 TERPENES - FLAVORS - BASES  
 2150 INDUSTRIAL DRIVE, NILES MI 49120  
 www.extractconsultants.com  
 INFORMATION: 1-888-541-9089

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC - USA: 800-424-9300 International: +1 703-527-3887 / 1-800-424-9300  
 CCN 1025270

### SECTION 2: Hazard(s) identification

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

##### GHS US classification

Flammable liquids Category 3	Flammable liquid and vapour
Skin corrosion/irritation Category 2	Causes skin irritation
Serious eye damage/eye irritation Category 2A	Causes serious eye irritation
Skin sensitization, Category 1	May cause an allergic skin reaction
Carcinogenicity Category 2	Suspected of causing cancer
Aspiration hazard Category 1	May be fatal if swallowed and enters airways

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

##### GHS US labeling

Hazard pictograms (GHS-US) :

		
GHS02	GHS07	GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) :

- Flammable liquid and vapour
- May be fatal if swallowed and enters airways
- Causes skin irritation
- May cause an allergic skin reaction
- Causes serious eye irritation
- Suspected of causing cancer

Precautionary statements (GHS-US) :

- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Keep container tightly closed.
- Ground/Bond container and receiving equipment
- Use explosion-proof electrical/ventilating/lighting equipment
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Avoid breathing dust/fume/gas/mist/vapors/spray.
- Wash hands, forearms and face thoroughly after handling.
- Contaminated work clothing must not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection.
- If swallowed: Immediately call a poison center or doctor

# BLACKBERRY SOLVENT FREE TERPENE FLAVOR

## Safety Data Sheet

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

If on skin: Wash with plenty of water  
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If exposed or concerned: Get medical advice/attention.  
Specific treatment (see supplemental first aid instruction on this label)  
Do NOT induce vomiting.  
If skin irritation occurs: Get medical advice/attention.  
If skin irritation or rash occurs: Get medical advice/attention.  
If eye irritation persists: Get medical advice/attention.  
Take off contaminated clothing and wash it before reuse.  
Wash contaminated clothing before reuse.  
In case of fire: Use media other than water to extinguish.  
Store in a well-ventilated place. Keep cool.  
Store locked up.  
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

### 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
ORANGE TERPENES	(CAS-No.) 68647-72-3	25 - 50	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304
BETA CARYOPHYLLENE	(CAS-No.) 87-44-5	10 - 25	Skin Sens. 1B, H317 Asp. Tox. 1, H304
MYRCENE	(CAS-No.) 123-35-3	10 - 25	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Carc. 2, H351 Asp. Tox. 1, H304
BETA PINENE	(CAS-No.) 18172-67-3	5 - 10	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304
LINALOOL	(CAS-No.) 78-70-6	5 - 10	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1B, H317
ALPHA PINENE	(CAS-No.) 7785-26-4	1 - 5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304
ALPHA TERPINEOL	(CAS-No.) 98-55-5	1 - 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
VALENCENE	(CAS-No.) 4630-07-3	>= 1	Asp. Tox. 1, H304
ORANGE OIL	(CAS-No.) 8028-48-6	< 5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304
TERPINOLENE	(CAS-No.) 586-62-9	1 - 5	Flam. Liq. 4, H227 Skin Sens. 1B, H317 Asp. Tox. 1, H304
GERANIOL	(CAS-No.) 106-24-1	0.1 - 1	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317

# BLACKBERRY SOLVENT FREE TERPENE FLAVOR

## Safety Data Sheet

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

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

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: Risk of lung edema.

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

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

#### 5.2. Specific hazards arising from the chemical

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

#### 5.3. Special protective equipment and precautions for fire-fighters

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

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures	: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.
----------------------	--

##### 6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
----------------------	---

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.
-------------------------------	---

# BLACKBERRY SOLVENT FREE TERPENE FLAVOR

## Safety Data Sheet

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

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Technical measures : Ground/bond container and receiving equipment.

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

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### LINALOOL NATURAL EXHOWOOD 98% (78-70-6)

Not applicable

#### CARYOPHYLLENE BETA, NATURAL (87-44-5)

Not applicable

#### PINENE ALPHA, NATURAL (7785-26-4)

Not applicable

#### ORANGE TERPENES (68647-72-3)

Not applicable

#### MYRCENE BETA, NATURAL (123-35-3)

Not applicable

#### GERANIOL, NATURAL (106-24-1)

Not applicable

#### TERPINEOL ALPHA, NATURAL (98-55-5)

Not applicable

#### TERPINOLENE NATURAL (586-62-9)

Not applicable

#### PINENE BETA, NATURAL (18172-67-3)

Not applicable

#### Valencene (4630-07-3)

Not applicable

#### ORANGE VALENCIA 5X FOLD (8028-48-6)

Not applicable

### 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

# BLACKBERRY SOLVENT FREE TERPENE FLAVOR

## Safety Data Sheet

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

### SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
	: PALE YELLOW TO YELLOW
Odor	: BERRY, TERPENES
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 49 °C
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 0.862 (0.852 - 0.872)
Solubility	: Insoluble.
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
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

#### 9.2. Other information

Refractive index	: 1.477 (1.467 - 1.487)
------------------	-------------------------

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Flammable liquid and vapour.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

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

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

#### LINALOOL NATURAL EXHOWOOD 98% (78-70-6)

ATE US (oral)	2790 mg/kg body weight
---------------	------------------------

#### PINENE ALPHA, NATURAL (7785-26-4)

ATE US (oral)	3700 mg/kg body weight
---------------	------------------------

# BLACKBERRY SOLVENT FREE TERPENE FLAVOR

## Safety Data Sheet

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

<b>ORANGE TERPENES (68647-72-3)</b>	
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)

<b>GERANIOL, NATURAL (106-24-1)</b>	
LD50 oral rat	3600 mg/kg body weight (Rat; Experimental value)
LD50 dermal rabbit	> 5000 mg/kg body weight (Rabbit; Experimental value)
ATE US (oral)	3600 mg/kg body weight

<b>TERPINEOL ALPHA, NATURAL (98-55-5)</b>	
ATE US (oral)	4300 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	: Suspected of causing cancer.

<b>ORANGE TERPENES (68647-72-3)</b>	
IARC group	3 - Not classifiable

<b>MYRCENE BETA, NATURAL (123-35-3)</b>	
IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified

Specific target organ toxicity – repeated exposure	: Not classified
--	------------------

Aspiration hazard	: May be fatal if swallowed and enters airways.
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: Risk of lung edema.

## 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.
-------------------	--

<b>ORANGE TERPENES (68647-72-3)</b>	
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 Daphnia 1	0.36 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)

<b>GERANIOL, NATURAL (106-24-1)</b>	
LC50 fish 1	> 9.8 mg/l (LC50; 96 h)

### 12.2. Persistence and degradability

<b>ORANGE TERPENES (68647-72-3)</b>	
Persistence and degradability	Readily biodegradable in water.

# BLACKBERRY SOLVENT FREE TERPENE FLAVOR

## Safety Data Sheet

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

ORANGE TERPENES (68647-72-3)	
ThOD	3.29 g O <sub>2</sub> /g substance

GERANIOL, NATURAL (106-24-1)	
Persistence and degradability	Readily biodegradable in water.
ThOD	2.9 g O <sub>2</sub> /g substance

### 12.3. Bioaccumulative potential

ORANGE TERPENES (68647-72-3)	
BCF fish 1	864.8 - 1022 (Pisces, QSAR, Fresh weight)
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).

GERANIOL, NATURAL (106-24-1)	
Bioaccumulative potential	No bioaccumulation data available.

### 12.4. Mobility in soil

ORANGE TERPENES (68647-72-3)	
Ecology - soil	Adsorbs into the soil.

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Additional information : Flammable vapors may accumulate in the container.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT  
Not regulated

### Transportation of Dangerous Goods

Not applicable

### Transport by sea

Transport document description (IMDG) : UN 1266 PERFUMERY PRODUCTS, 3, III  
UN-No. (IMDG) : 1266  
Proper Shipping Name (IMDG) : PERFUMERY PRODUCTS  
Class (IMDG) : 3 - Flammable liquids  
Packing group (IMDG) : III - substances presenting low danger  
Limited quantities (IMDG) : 5 L

### Air transport

Transport document description (IATA) : UN 1266 Perfumery products, 3, III  
UN-No. (IATA) : 1266  
Proper Shipping Name (IATA) : Perfumery products  
Class (IATA) : 3 - Flammable Liquids  
Packing group (IATA) : III - Minor Danger

# BLACKBERRY SOLVENT FREE TERPENE FLAVOR

## Safety Data Sheet

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

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

<b>LINALOOL NATURAL EXHOWOOD 98% (78-70-6)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>CARYOPHYLLENE BETA, NATURAL (87-44-5)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>PINENE ALPHA, NATURAL (7785-26-4)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>ORANGE TERPENES (68647-72-3)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>MYRCENE BETA, NATURAL (123-35-3)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>GERANIOL, NATURAL (106-24-1)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>TERPINEOL ALPHA, NATURAL (98-55-5)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>TERPINOLENE NATURAL (586-62-9)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>PINENE BETA, NATURAL (18172-67-3)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>Valencene (4630-07-3)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>ORANGE VALENCIA 5X FOLD (8028-48-6)</b>
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

#### 15.2. International regulations

##### CANADA

<b>LINALOOL NATURAL EXHOWOOD 98% (78-70-6)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>CARYOPHYLLENE BETA, NATURAL (87-44-5)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>PINENE ALPHA, NATURAL (7785-26-4)</b>
Listed on the Canadian NDSL (Non-Domestic Substances List)
<b>ORANGE TERPENES (68647-72-3)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>MYRCENE BETA, NATURAL (123-35-3)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>GERANIOL, NATURAL (106-24-1)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>TERPINEOL ALPHA, NATURAL (98-55-5)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>TERPINOLENE NATURAL (586-62-9)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>PINENE BETA, NATURAL (18172-67-3)</b>
Listed on the Canadian DSL (Domestic Substances List)

# BLACKBERRY SOLVENT FREE TERPENE FLAVOR

## Safety Data Sheet

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

### Valencene (4630-07-3)

Listed on the Canadian DSL (Domestic Substances List)

### ORANGE VALENCIA 5X FOLD (8028-48-6)

Listed on the Canadian DSL (Domestic Substances List)

### EU-Regulations


No additional information available

### National regulations

#### MYRCENE BETA, NATURAL (123-35-3)

Listed on IARC (International Agency for Research on Cancer)

### 15.3. US State regulations

 **WARNING:** This product can expose you to myrcene, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

#### TERPINOLENE NATURAL (586-62-9)

U.S. - New Jersey - Right to Know Hazardous Substance List

## SECTION 16: Other information

Revision date : 10/29/2019

Full text of H-phrases:

Asp. Tox. 1	Aspiration hazard Category 1
Carc. 2	Carcinogenicity Category 2
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 3	Flammable liquids Category 3
Flam. Liq. 4	Flammable liquids Category 4
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization, Category 1
Skin Sens. 1B	Skin sensitization, category 1B
H226	Flammable liquid and vapour
H227	Combustible liquid
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
H351	Suspected of causing cancer

SDS US (GHS HazCom 2012)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*