

### SECTION 1: Identification

#### 1.1. Identification

Product form : Substance  
 Product name : CEDARWOOD TEXAS WHITE OIL  
 CAS-No. : 68990-83-0  
 Product code : 50-6075-01

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

No additional information available

#### 1.3. Supplier

Lotus Brands, Inc.  
 1100 E. Lotus Drive  
 Silver Lake WI 53181  
 PH: (262) 889-8561

#### 1.4. Emergency telephone number

Emergency number : (800) 824-6396

### SECTION 2: Hazard(s) identification

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

##### GHS US classification

Skin corrosion/irritation Category 2  
 Skin sensitization, category 1B  
 Aspiration hazard Category 1

Causes skin irritation  
 May cause an allergic skin reaction  
 May be fatal if swallowed and enters airways

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

##### GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

May be fatal if swallowed and enters airways  
 Causes skin irritation  
 May cause an allergic skin reaction

Precautionary statements (GHS US) :

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.  
 If on skin: Wash with plenty of water.  
 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.  
 Take off contaminated clothing and wash it before reuse.  
 Wash contaminated clothing before reuse.  
 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

# CEDARWOOD TEXAS WHITE OIL

## Safety Data Sheet

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

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Name	Product identifier	%	GHS US classification
CEDARWOOD OIL	(CAS-No.) 68990-83-0	100	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304

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

### 3.2. Mixtures

Not applicable

## 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 : 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 : 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 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

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

### 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. 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.
- 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.

# CEDARWOOD TEXAS WHITE OIL

## Safety Data Sheet

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

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. 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 locked up. Store in a well-ventilated place. Keep cool.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### CEDARWOOD OIL (68990-83-0)

No additional information available

#### 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



### SECTION 9: Physical and chemical properties

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

- Physical state : Liquid
- : PALE YELLOW/AMBER TO YELLOW/AMBER
- Odor : CEDAR, WOODY, PERSISTENT ODOR
- 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 : 100 °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 : 0.958 (0.948 – 0.968)

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Solubility	: Insoluble.
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
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

VOC content	: 8.8 %
Refractive index	: 1.507 (1.497 – 1.527)

## 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

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

### 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
Skin corrosion/irritation	: Causes skin irritation.
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
STOT-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 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.
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### 12.2. Persistence and degradability

No additional information available

# CEDARWOOD TEXAS WHITE OIL

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

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 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

Not applicable

### Transport by sea

Not applicable

### Air transport

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### CEDARWOOD OIL (68990-83-0)

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

### 15.2. International regulations

#### CANADA

#### CEDARWOOD OIL (68990-83-0)

Listed on the Canadian DSL (Domestic Substances List)

### EU-Regulations

No additional information available

### National regulations

No additional information available

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

## SECTION 16: Other information

Revision date : 11/16/2020

# CEDARWOOD TEXAS WHITE OIL

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Full text of H-phrases:

H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction

*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.*



# FIR NEEDLE SIBERIAN OIL

## Safety Data Sheet

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

Issue date: 11/30/2018

Revision date: 11/30/2018

Version: 1.2

### SECTION 1: Identification

#### 1.1. Identification

Product form : Substance  
 Substance name : FIR NEEDLE SIBERIAN OIL  
 CAS-No. : 8021-29-2  
 Product code : 50-6125-01

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

No additional information available

#### 1.3. Supplier

Lotus Brands, Inc.  
 1100 E. Lotus Drive  
 Silver Lake WI 53181  
 PH: (262) 889-8561

#### 1.4. Emergency telephone number

Emergency number : (800) 824-6396

### 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
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

Precautionary statements (GHS US) : 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/vapours/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.  
 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

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and easy to do. Continue rinsing.  
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

Name	Product identifier	%	GHS US classification
FIR NEEDLE OIL	(CAS-No.) 8021-29-2	100	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Asp. Tox. 1, H304

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

### 3.2. Mixtures

Not applicable

## 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.



# FIR NEEDLE SIBERIAN OIL

## Safety Data Sheet

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

### 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/vapours/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

For containment : Collect spillage.

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

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

##### FIR NEEDLE SIBERIAN OIL (8021-29-2)

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:

# FIR NEEDLE SIBERIAN OIL

## Safety Data Sheet

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In case of insufficient ventilation, wear suitable respiratory equipment

### SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
	: COLORLESS TO PALE YELLOW LIQUID
Odor	: AROMATIC ODOR
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 43 °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	: 0.897 (0.887 - 0.907)
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

VOC content	: 88.6 %
Refractive index	: 1.47 (1.462 - 1.477)

### 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
Skin corrosion/irritation	: Causes skin irritation.

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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
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-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.

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 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

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Class (IATA) : 3 - Flammable Liquids  
Packing group (IATA) : III - Minor Danger

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### FIR NEEDLE OIL (8021-29-2)

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

#### 15.2. International regulations

##### CANADA

##### FIR NEEDLE OIL (8021-29-2)

Listed on the Canadian DSL (Domestic Substances List)


#### EU-Regulations

No additional information available

#### National regulations

No additional information available

#### 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).

### SECTION 16: Other information

Revision date : 11/30/2018

Full text of H-phrases:

H226	Flammable liquid and vapour
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

*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.*



# SAFETY DATA SHEET

2012 OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200)

Revision Number 5  
Revision date 07-Aug-2020  
Issuing Date 28-Aug-2020

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

**Product Code** 11300031  
**Product Name** Lavender 40/42 Essence Natural

**CAS No** N/A

### Recommended use of the chemical and restrictions on use

**Recommended use** Aromatic Ingredient(s). For Industrial Use Only.  
**Restrictions on use** Do not ingest as such. Avoid eye contact.

### Details of the supplier of the safety data sheet

#### Supplier

Lotus Brands, Inc.  
1100 E. Lotus Drive  
Silver Lake WI 53181  
PH: (262) 889-8561

### Emergency telephone number

**Emergency Telephone** (800) 824-6396

## 2. HAZARDS IDENTIFICATION

### Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1B
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 2
Aspiration hazard	Category 1
Flammable liquids	Category 4

### Hazards not otherwise classified (HNOC)

Not applicable

### Label elements

#### **Signal word**

**Danger**

#### **Hazard statements**

Causes skin irritation  
Causes serious eye damage  
May cause an allergic skin reaction  
Suspected of damaging fertility or the unborn child  
May cause damage to organs  
May be fatal if swallowed and enters airways  
Combustible liquid



**Appearance** Colorless to pale yellow      **Physical state** Liquid      **Odor** Characteristic

#### Precautionary Statements - Prevention

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Wash face, hands and any exposed skin thoroughly after handling  
 Contaminated work clothing must not be allowed out of the workplace  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Do not eat, drink or smoke when using this product  
 Keep away from flames and hot surfaces. - No smoking

#### Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention  
 Specific treatment (see supplemental first aid instructions on this label)  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 Immediately call a POISON CENTER or doctor  
 IF ON SKIN: Wash with plenty of water and soap  
 Take off contaminated clothing and wash it before reuse  
 If skin irritation or rash occurs: Get medical advice/attention  
 IF SWALLOWED: Immediately call a POISON CENTER or doctor  
 Do NOT induce vomiting  
 In case of fire: Use CO<sub>2</sub>, dry chemical, or foam to extinguish

#### Precautionary Statements - Storage

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

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

#### Other information

May be harmful if swallowed. Toxic to aquatic life with long lasting effects. Toxic to aquatic life.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%	GHS Classification
Linalool	78-70-6	40 - 50	Flam. Liq. 4 (H227) Acute Tox. Oral 5 (H303) Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) Skin Sens. 1B (H317) Aquatic Acute 3 (H402)
Linalyl acetate	115-95-7	30 - 40	Flam. Liq. 4 (H227) Skin Irrit. 2 (H315) Eye Irrit. 2B (H320) Skin Sens. 1B (H317) Aquatic Acute 3 (H402)
Eucalyptol	470-82-6	5.0 - 10	Flam. Liq. 3 (H226) Acute Tox. Oral 5 (H303) Skin Irrit. 3 (H316) Skin Sens. 1B (H317)
dl-Camphor	21368-68-3	5.0 - 10	STOT SE 2 (H371)

			Skin Irrit. 2 (H315) Flam. Sol. 2 (H228) Eye Dam. 1 (H318) Aquatic Chronic 2 (H411) Aquatic Acute 2 (H401) Acute Tox. Oral 4 (H302) Acute Tox. Inhalation - dust and mist 4 (H332)
cis-beta-Ocimene	3338-55-4	1.0 - 5.0	Flam. Liq. 3 (H226) Acute Tox. Oral 5 (H303) Skin Irrit. 2 (H315) Asp. Tox. 1 (H304) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)
4-Carvomenthenol	562-74-3	1.0 - 5.0	Flam. Liq. 4 (H227) Acute Tox. Oral 4 (H302) Acute Tox. Dermal 5 (H313) Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) Aquatic Acute 3 (H402)
1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one	76-22-2	1.0 - 5.0	STOT SE 2 (H371) Skin Irrit. 2 (H315) Flam. Sol. 2 (H228) Eye Dam. 1 (H318) Acute Tox. Inhalation - dust and mist 4 (H332)
beta-Caryophyllene	87-44-5	1.0 - 5.0	Skin Sens. 1B (H317) Asp. Tox. 1 (H304) Aquatic Chronic 4 (H413)
3,7-Dimethyl-1,3,6-octatriene	13877-91-3	1.0 - 5.0	Flam. Liq. 3 (H226) Acute Tox. Oral 5 (H303) Skin Irrit. 2 (H315) Asp. Tox. 1 (H304) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)
beta-Pinene	127-91-3	1.0 - 5.0	Flam. Liq. 3 (H226) Skin Irrit. 2 (H315) Skin Sens. 1B (H317) Asp. Tox. 1 (H304) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
beta-Farnesene	18794-84-8	1.0 - 5.0	Skin Irrit. 3 (H316) Asp. Tox. 1 (H304)
Limonene	5989-27-5	1.0 - 5.0	Flam. Liq. 3 (H226) Skin Irrit. 2 (H315) Skin Sens. 1B (H317) Asp. Tox. 1 (H304) Aquatic Acute 1 (H400) Aquatic Chronic 3 (H412)
Borneol	507-70-0	1.0 - 5.0	Skin Irrit. 2 (H315) Flam. Sol. 1 (H228) Aquatic Chronic 2 (H411) Aquatic Acute 2 (H401) Acute Tox. Oral 5 (H303)
1-Octen-3-yl acetate	2442-10-6	1.0 - 5.0	Flam. Liq. 4 (H227) Acute Tox. Oral 4 (H302) Skin Sens. 1B (H317)
alpha-Terpineol	98-55-5	1.0 - 5.0	Flam. Liq. 4 (H227) Acute Tox. Oral 5 (H303) Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) Aquatic Acute 2 (H401)
alpha-Pinene	80-56-8	0.1 - 1.0	Flam. Liq. 3 (H226)

			Acute Tox. Oral 4 (H302) Skin Irrit. 2 (H315) Skin Sens. 1B (H317) Asp. Tox. 1 (H304) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
1-Octen-3-ol	3391-86-4	0.1 - 1.0	Skin Sens. 1B (H317) Skin Irrit. 2 (H315) Flam. Liq. 4 (H227) Eye Irrit. 2A (H319) Aquatic Acute 2 (H401) Acute Tox. Dermal 5 (H313) Acute Tox. Inhalation - dust and mist 4 (H332) Acute Tox. Oral 3 (H301)
Geranyl acetate	105-87-3	0.1 - 1.0	Skin Sens. 1B (H317) Skin Irrit. 2 (H315) Aquatic Chronic 3 (H412) Aquatic Acute 2 (H401)
Geraniol	106-24-1	0.1 - 1.0	Skin Sens. 1B (H317) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Acute 3 (H402) Acute Tox. Oral 5 (H303)
beta-Myrcene	123-35-3	0.1 - 1.0	Flam. Liq. 3 (H226) Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) Asp. Tox. 1 (H304) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)
Terpinolene	586-62-9	0.1 - 1.0	Skin Sens. 1B (H317) Skin Irrit. 3 (H316) Flam. Liq. 4 (H227) Asp. Tox. 1 (H304) Aquatic Chronic 1 (H410) Aquatic Acute 1 (H400) Acute Tox. Oral 5 (H303)
Camphene	79-92-5	0.1 - 1.0	Flam. Sol. 2 (H228) Eye Irrit. 2B (H320) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Nerol	106-25-2	0.1 - 1.0	Acute Tox. Oral 5 (H303) Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) Skin Sens. 1B (H317) Aquatic Acute 2 (H401)
Coumarin	91-64-5	0.1 - 1.0	Acute Tox. Oral 4 (H302) Skin Sens. 1B (H317) Aquatic Acute 3 (H402) Aquatic Chronic 3 (H412)
p-Cymene	99-87-6	0.1 - 1.0	Skin Irrit. 3 (H316) Repr. 2 (H361) Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Aquatic Chronic 2 (H411) Aquatic Acute 2 (H401) Acute Tox. Oral 5 (H303)
delta-3-Carene	13466-78-9	0.1 - 1.0	Skin Sens. 1 (H317) Skin Irrit. 2 (H315) Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Aquatic Chronic 1 (H410) Aquatic Acute 1 (H400)



			Acute Tox. Oral 5 (H303) Acute Tox. Inhalation - dust and mist 4 (H332)
Carvacrol	499-75-2	0.1 - 1.0	Acute Tox. Oral 4 (H302) Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) Skin Sens. 1B (H317) Aquatic Acute 3 (H402)
p-Mentha-1,4-diene	99-85-4	0.1 - 1.0	Skin Irrit. 3 (H316) Repr. 2 (H361) Flam. Liq. 3 (H226) Acute Tox. Oral 5 (H303) Aquatic Chronic 2 (H411)

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES**

**Description of first aid measures**

- General advice** Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.
- Inhalation** Remove to fresh air. Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical advice/attention. Delayed pulmonary edema may occur.
- Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
- Skin contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. May cause an allergic skin reaction. If symptoms persist, call a physician.
- Ingestion** Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Get immediate medical advice/attention.
- Self-protection of the first aider** Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** Burning sensation. Itching. Rashes. Hives. Difficulty in breathing. Coughing and/ or wheezing. Dizziness.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** May cause sensitization in susceptible persons. Treat symptomatically. Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances.

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**5. FIRE-FIGHTING MEASURES**

<b>Suitable Extinguishing Media</b> Large Fire	Dry chemical. Carbon dioxide (CO <sub>2</sub> ). Water spray. Alcohol resistant foam. CAUTION: Use of water spray when fighting fire may be inefficient.
<b>Unsuitable extinguishing media</b>	Do not scatter spilled material with high pressure water streams.
<b>Specific hazards arising from the chemical</b>	Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Product is or contains a sensitizer. May cause sensitization by skin contact.
<b>Explosion data</b>	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	Yes.
<b>Special protective equipment for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Take precautionary measures against static discharges. Do not touch or walk through spilled material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak.
<b>Other information</b>	Refer to protective measures listed in Sections 7 and 8.

### Methods and material for containment and cleaning up

<b>Methods for containment</b>	Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike far ahead of liquid spill for later disposal.
<b>Methods for cleaning up</b>	Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

<b>Advice on safe handling</b>	Use personal protection equipment. Do not breathe vapor or mist. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Use with local exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. In case of insufficient ventilation, wear suitable respiratory equipment. Take off contaminated clothing and wash before reuse. Remove contaminated clothing and shoes.
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### Conditions for safe storage, including any incompatibilities

<b>Storage Conditions</b>	Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition.
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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters****Exposure Limits**

The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one 76-22-2	STEL: 3 ppm synthetic TWA: 2 ppm synthetic	TWA: 2 mg/m <sup>3</sup> (vacated) TWA: 2 mg/m <sup>3</sup>	IDLH: 200 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup> synthetic
beta-Pinene 127-91-3	dermal sensitizer TWA: 20 ppm	-	-
alpha-Pinene 80-56-8	dermal sensitizer TWA: 20 ppm	-	-
delta-3-Carene 13466-78-9	dermal sensitizer TWA: 20 ppm	-	-

**Appropriate engineering controls****Engineering controls**

Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Tight sealing safety goggles.

**Hand protection**

Wear suitable gloves. Impervious gloves.

**Skin and body protection**

Wear suitable protective clothing. Long sleeved clothing.

**Respiratory protection**

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations**

Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

Physical state	Liquid
Appearance	Colorless to pale yellow
Odor	Characteristic
Odor threshold	No information available

**Property****Values****Remarks • Method**

pH		No information available
Melting point / freezing point		No information available
Boiling point / boiling range	> 35 °C	No information available
Flash point	74 °C / 165 °F	CC (closed cup)
Evaporation rate		No information available
Flammability (solid, gas)		No information available
Vapor Pressure (mm Hg @ 20°C):		No information available
Vapor density		No information available
Relative density		No information available

Specific Gravity @ 20/20 °C	0.8850-0.8990	RTM-101
Solubility(ies)		
Water solubility		No information available
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Viscosity		No information available
<u>Other information</u>		
Explosive properties	No information available	
Oxidizing properties	No information available	

## 10. STABILITY AND REACTIVITY

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Strong acids. Strong bases. Strong oxidizing agents.
Hazardous decomposition products	None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

Product Information	.
<b>Inhalation</b>	Specific test data for the substance or mixture is not available. Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. May cause irritation of respiratory tract.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available. Causes serious eye damage. May cause irreversible damage to eyes. (based on components).
<b>Skin contact</b>	Specific test data for the substance or mixture is not available. May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Repeated exposure may cause skin dryness or cracking. Causes skin irritation.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways.

### Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Redness. Burning. May cause blindness. Itching. Rashes. Hives. Difficulty in breathing. Coughing and/ or wheezing. Dizziness. May cause redness and tearing of the eyes.
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### Acute toxicity

#### Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	3,397.10 mg/kg
ATEmix (dermal)	> 5000 mg/kg
ATEmix (inhalation-dust/mist)	14.20 mg/l

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Skin corrosion/irritation</b>	Classification based on data available for ingredients. Irritating to skin.
<b>Serious eye damage/eye irritation</b>	Classification based on data available for ingredients. Causes burns. Risk of serious damage to eyes.
<b>Respiratory or skin sensitization</b>	May cause sensitization by skin contact.
<b>Germ cell mutagenicity</b>	No information available.

### **Carcinogenicity**

The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical name	ACGIH	IARC	NTP
Carvacrol 499-75-2		Group 2A	

## 12. ECOLOGICAL INFORMATION

### **Ecotoxicity**

Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

### **Persistence and degradability**

No information available.

### **Bioaccumulation**

There is no data for this product.

### **Other adverse effects**

No information available.

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

## 14. TRANSPORT INFORMATION

**DOT** Not regulated

### **IATA/ICAO**

<b>UN/ID no</b>	3082
<b>Proper shipping name</b>	Environmentally hazardous substance, liquid, n.o.s. (dl-Camphor and cis-beta-Ocimene)
<b>Hazard class</b>	9
<b>Packing group</b>	III

### **IMDG/IMO**

UN number	3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (dl-Camphor and cis-beta-Ocimene)
Transport hazard class(es)	9
Packing group	III
EmS-No	F-A, S-F

## 15. REGULATORY INFORMATION

### US Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### **SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

### US State Regulations

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

## 16. OTHER INFORMATION

### Disclaimer

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.

**End of Safety Data Sheet**



# SAFETY DATA SHEET

This safety data sheet complies with the requirements of:  
 OSHA CFR Title 29 CFR 1910.1200

Version 5.03

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**  
**Product Code(s)** 3103  
**Product name** Oil Spearmint First Cutting FCC (Native Variety) (Mentha spicata)  
**UN/ID No** 3082  
**EC-No** 283-656-2  
**CAS-No** 8008-79-5  
**FEMA Numbers** 3032

**Recommended use of the chemical and restrictions on use**  
**Recommended Use** No information available.  
**Uses advised against** No information available

**Manufacturer** Lotus Brands,  
 Inc.  
 1100 E. Lotus Drive  
 Silver Lake WI 53181  
 PH: (262) 889-8561

**Emergency telephone**  
 (800) 824-6396

## 2. HAZARDS IDENTIFICATION

### Classification

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin Sensitization	Category 1
Aspiration toxicity	Category 1
Flammable liquids	Category 4

### GHS Label elements, including precautionary statements

#### Emergency Overview

<p><b>Danger</b></p> <p><b>Hazard Statements</b>          Harmful if swallowed          Causes skin irritation          Causes serious eye irritation          May cause an allergic skin reaction          May be fatal if swallowed and enters airways          Combustible liquid</p>
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**Appearance** clear

**Physical state** liquid

**Aroma** reminiscent of carvone

**Precautionary Statements - Response**

Specific treatment (see .? on this label)

IF IN EYES: 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

IF ON SKIN: Wash with plenty of soap and water

Take off contaminated clothing and wash before reuse

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

Rinse mouth

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

In case of fire: Use CO2, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store locked up

Store in a well-ventilated place. Keep cool

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

**Other information**

- May be harmful in contact with skin
- Toxic to aquatic life with long lasting effects
- Toxic to aquatic life

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No	Weight %	Trade Secret
CARVONE	99-49-0	50-90%	*
LIMONENE	5989-27-5	15-20%	*
PINENES	80-56-8	1-5%	*

**4. FIRST AID MEASURES**

**First aid measures for different exposure routes**

**General advice**

If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.

**Eye contact**

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

**Skin contact**

Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash

off immediately with soap and plenty of water. Immediate medical attention is not required.

**Inhalation** Move to fresh air. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Call a physician. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician. Move to fresh air in case of accidental inhalation of vapors or decomposition products.

**Ingestion** Do NOT induce vomiting. Drink plenty of water. If symptoms persist, call a physician. Rinse mouth. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.

**Self-protection of the first aider** Use personal protective equipment.

**Most important symptoms/effects, acute and delayed**

**Main Symptoms** Hives.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Note to physicians** May cause sensitization in susceptible persons. Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**

Use. Dry chemical. Carbon dioxide CO<sub>2</sub>. Water spray. Alcohol-resistant foam.

**Unsuitable extinguishing media**

Decomposition by contact with water may generate vapors which can be ignited by heat or open flame.

**Specific hazards arising from the chemical**

Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes. May cause sensitization in susceptible persons. Keep product and empty container away from heat and sources of ignition. Risk of ignition.

**Explosion data**

**Sensitivity to Mechanical Impact** none.

**Sensitivity to Static Discharge** Yes.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Pay attention to flashback. Take precautionary measures against static discharges.

**Environmental precautions**

**Environmental precautions** Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

**Methods and materials for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Cover liquid spill with sand, earth or other noncombustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Dam up. Take precautionary measures against static discharges.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Use only in area provided with appropriate exhaust ventilation. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from heat, sparks and open flame. No smoking. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep away from heat and sources of ignition. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. Keep away from heat.

**Incompatible products** None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### Exposure controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Tightly fitting safety goggles. Face-shield.

**Skin and body protection** Chemical resistant apron.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection must be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** When using, do not eat, drink or smoke. Wash contaminated clothing before reuse. Provide regular cleaning of equipment, work area and clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical and chemical properties

Physical state	liquid
Appearance	clear
Aroma	reminiscent of carvone
Color	water white to pale yellow

<u>Property</u>	<u>Values</u>	<u>Method</u>
pH		No information available
Melting/freezing point	NA	FCC Method
Boiling point/boiling range	NA	FCC Method
Flash Point	63 °C / 145 °F	Closed cup
Evaporation rate	No information available	No information available
Flammability (solid, gas)	No information available	No information available
Flammability Limits in Air		No information available
Upper flammability limit	No information available	
lower flammability limit	No information available	
Vapor pressure mm Hg 20°C		No information available
Vapor density		No information available
Specific Gravity @ 25C	0.9170 - 0.9340	FCC Method
Specific Gravity @ 20C	0.9200 - 0.9370	FCC Method
Refractive Index @ 20C	1.4840 - 1.4910	FCC Method
Water solubility	insoluble	
Solubility in other solvents		No information available
Partition coefficient: n-octanol/water		No information available
Autoignition temperature	No information available	No information available
Decomposition temperature		No information available
Viscosity, kinematic	No information available	No information available
Viscosity, dynamic	No information available	
Explosive properties	No information available	
Oxidizing Properties	No information available	

### Other information

Softening point	No information available
Molecular Weight	No information available
VOC Content(%)	22
Density VALUE	No information available
Bulk Density VALUE	No information available

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

None under normal processing.

### Conditions to Avoid

Heat, flames and sparks.

### Incompatible Materials

None known based on information supplied.

### Hazardous Decomposition Products

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

<b>Product Information</b>	Product does not present an acute toxicity hazard based on known information
<b>Inhalation</b>	There is no data available for this product.
<b>Eye contact</b>	There is no data available for this product.
<b>Skin contact</b>	There is no data available for this product.
<b>Ingestion</b>	There is no data available for this product.

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
CARVONE 99-49-0	1640 mg/kg ( Rat )	-	-
LIMONENE 5989-27-5	4400 mg/kg ( Rat )	2000 mg/kg ( Rabbit )	-
PINENES 80-56-8	2100 mg/kg ( Rat )	5000 mg/kg ( Rat )	-

### Information on toxicological effects

**Symptoms** No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No information available.  
**Germ Cell Mutagenicity** No information available.  
**Carcinogenicity** This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

Chemical Name	ACGIH	IARC	NTP	OSHA
LIMONENE 5989-27-5		Group 3		

*IARC (International Agency for Research on Cancer)  
Group 3 - Not Classifiable as to Carcinogenicity in Humans*

**Reproductive toxicity** No information available.  
**Specific target organ systemic toxicity (single exposure)** No information available.  
**Specific target organ systemic toxicity (repeated exposure)** No information available.

**Chronic toxicity** Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure.

**Aspiration hazard** No information available.

### Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document  
 . mg/kg

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Toxic to aquatic life with long lasting effects

18% of the mixture consists of components(s) of unknown hazards to the aquatic environment

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

Chemical Name	log Pow
PINENES 80-56-8	4.1

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment**

**Waste Disposal Methods** Dispose of in accordance with local regulations.

**Contaminated packaging** Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
LIMONENE 5989-27-5	Toxic

**14. TRANSPORT INFORMATION**

**DOT/ADR**

UN/ID No 3082  
 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (LIMONENE, PINENES)  
 Hazard class 9  
 Packing Group III  
 ERG Code 171

Not regulated (If shipped in NON BULK packaging by ground transport)

**ICAO/IATA**

UN/ID No 3082  
 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (LIMONENE, PINENES)  
 Hazard class 9  
 Packing Group III

**IMDG / IMO**

UN/ID No 3082  
 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (LIMONENE, PINENES)  
 Hazard class 9  
 Packing Group III  
 Marine pollutant This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO

**15. REGULATORY INFORMATION**

**International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

**Legend:**

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS** - Japan Existing and New Chemical Substances
- IECSC** - China Inventory of Existing Chemical Substances
- KECL** - Korean Existing and Evaluated Chemical Substances
- PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- AICS** - Australian Inventory of Chemical Substances

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	no
<b>Fire Hazard</b>	Yes
<b>Sudden Release of Pressure Hazard</b>	no
<b>Reactive Hazard</b>	no

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**U.S. State Regulations**

**California Proposition 65**

This product is not, to the best of our knowledge, subject to the labeling requirements under California Proposition 65

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
PINENES 80-56-8	X	X	X

**U.S. EPA Label information**

**16. OTHER INFORMATION**

<u>NFPA</u>	Health Hazard 2	Flammability 2	Instability 0	Physical and chemical hazards *
<u>HMIS</u>	Health Hazard 2	Flammability 2	Physical Hazard 0	Personal protection B

Revision Date 08-Nov-2019  
Revision Note No information available  
Revision# 5.03

**WARNING/DISCLAIMER:**

Our ingredients have not been tested, nor have they been determined safe, for inhalation or use in any electronic smoking devices, electronic nicotine delivery systems, electronic cigarettes, or other similar devices (collectively "E-Cigarettes") or in any E-Liquids used with E-Cigarettes. By receiving Citrus and Allied Essences Ltd. ingredients, the recipient confirms that they will not use these ingredients in connection with the manufacture and distribution of E-Cigarettes, E-Liquids or any component thereof. WE DISCLAIM, TO THE FULLEST EXTENT PERMITTED BY LAW, ALL WARRANTIES, EXPRESS OR IMPLIED, and disclaim all liability in connection with the use of our ingredients in connection with E-Cigarettes and E-Liquids. All such risks are assumed by you and the user.

**Disclaimer**

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.

end





# SAFETY DATA SHEET

This safety data sheet complies with the requirements of:  
OSHA CFR Title 29 CFR 1910.1200

Version 6.03

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

**Product Code(s)** 150320  
**Product name** OIL LEMON CALIFORNIA TYPE C.P. EXTRA FCC

**UN/ID No** 1993  
**EC-No** 284-515-8  
**CAS-No** 8008-56-8  
**FEMA Numbers** 2625

### Recommended use of the chemical and restrictions on use

**Recommended Use** No information available.  
**Uses advised against** No information available

### **Manufacturer**

Lotus Brands, Inc.  
1100 E. Lotus Drive  
Silver Lake WI 53181  
PH: (262) 889-8561

### Emergency telephone

(800) 824-6396

## 2. HAZARDS IDENTIFICATION

### Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin Sensitization	Category 1
Aspiration toxicity	Category 1
Flammable liquids	Category 3

### GHS Label elements, including precautionary statements

#### Emergency Overview

#### Danger

#### Hazard Statements

Causes skin irritation  
Causes serious eye irritation  
May cause an allergic skin reaction  
May be fatal if swallowed and enters airways  
Flammable liquid and vapor



**Appearance** clear

**Physical state** liquid

**Aroma** characteristic of lemon peel

**Precautionary Statements - Response**

Specific treatment (see .? on this label)

IF IN EYES: 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

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

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

In case of fire: Use CO2, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store locked up

Store in a well-ventilated place. Keep cool

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

**Other information**

- May be harmful if swallowed
- May be harmful in contact with skin
- Very toxic to aquatic life with long lasting effects
- Very toxic to aquatic life

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No	Weight %	Trade Secret
LIMONENE	5989-27-5	50-90%	*
BETA PINENE	127-91-3	10-15%	*
GAMMA TERPINENE	99-85-4	5-10%	*
CITRAL	5392-40-5	1-5%	*
MYRCENE	123-35-3	1-5%	*

**4. FIRST AID MEASURES**

**First aid measures for different exposure routes**

**General advice**

Immediate medical attention is required. Show this material safety data sheet to the doctor in attendance. If symptoms persist, call a physician.

**Eye contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing.

<b>Skin contact</b>	Wash off immediately with plenty of water. Wash contaminated clothing before reuse. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water. Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, call a physician. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. Move to fresh air in case of accidental inhalation of vapors or decomposition products.
<b>Ingestion</b>	Do NOT induce vomiting. Drink plenty of water. Immediate medical attention is not required. Rinse mouth. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.
<b>Self-protection of the first aider</b>	Remove all sources of ignition. Use personal protective equipment.

**Most important symptoms/effects, acute and delayed**

**Main Symptoms** Hives.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Note to physicians** May cause sensitization in susceptible persons. Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**

Use. Dry chemical. Carbon dioxide CO<sub>2</sub>. Water spray. Alcohol-resistant foam.

**Unsuitable extinguishing media**

Decomposition by contact with water may generate vapors which can be ignited by heat or open flame.

**Specific hazards arising from the chemical**

Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes. May cause sensitization in susceptible persons. Keep product and empty container away from heat and sources of ignition. Risk of ignition.

**Explosion data**

**Sensitivity to Mechanical Impact** none.

**Sensitivity to Static Discharge** Yes.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak. Pay attention to flashback. Take precautionary measures against static discharges.

**Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

**Methods and materials for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Soak up with inert absorbent material. Take precautionary measures against static discharges.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on safe handling** Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only in an area containing flame proof equipment. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Use only in area provided with appropriate exhaust ventilation. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Keep away from heat, sparks and open flame. No smoking. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat.

**Incompatible products** None known based on information supplied.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
BETA PINENE 127-91-3	TWA: 20 ppm	-	
CITRAL 5392-40-5	TWA: 5 ppm inhalable fraction and vapor S*	-	

**Exposure controls**

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Tightly fitting safety goggles. Face-shield.

**Skin and body protection** Chemical resistant apron.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection must be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical and chemical properties

<b>Physical state</b>	liquid
<b>Appearance</b>	clear
<b>Aroma</b>	characteristic of lemon peel
<b>Color</b>	pale to deep yellow or greenish yellow

<u>Property</u>	<u>Values</u>	<u>Method</u>
<b>pH</b>		No information available
<b>Melting/freezing point</b>	NA °C	Visual observation
<b>Boiling point/boiling range</b>	NA °C	equivalent/similar to OECD 103
<b>Flash Point</b>	46 °C / 115 °F	Closed cup
<b>Evaporation rate</b>	No information available	No information available
<b>Flammability (solid, gas)</b>	No information available	No information available
<b>Flammability Limits in Air</b>		No information available
<b>Upper flammability limit</b>	No information available	
<b>lower flammability limit</b>	No information available	
<b>Vapor pressure mm Hg 20°C</b>		No information available
<b>Vapor density</b>		No information available
<b>Specific Gravity @ 25C</b>	0.8490 - 0.8550	FCC Method
<b>Specific Gravity @ 20C</b>	0.8520 - 0.8580	FCC Method
<b>Refractive Index @ 20C</b>	1.4730 - 1.4760	FCC Method
<b>Water solubility</b>	Practically insoluble	
<b>Solubility in other solvents</b>		No information available
<b>Partition coefficient: n-octanol/water</b>		log Kow 3.33 – 6.3. The fraction of log Kow >4 was 91%
QSAR model (KOWWIN v1.67a)		<b>Autoignition temperature</b> 235 °C
EU Method A.15		<b>Decomposition temperature</b>
No information available		<b>Viscosity, kinematic</b> No information available
No information available		<b>Viscosity, dynamic</b> No information available
<b>Explosive properties</b>	No information available	
<b>Oxidizing Properties</b>	No information available	

### Other information

<b>Softening point</b>	No information available
<b>Molecular Weight</b>	No information available
<b>VOC Content(%)</b>	83
<b>Density VALUE</b>	No information available
<b>Bulk Density VALUE</b>	No information available

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

None under normal processing.

### Conditions to Avoid

Heat, flames and sparks.

**Incompatible Materials**

None known based on information supplied.

**Hazardous Decomposition Products**

None known based on information supplied.

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

<b>Product Information</b>	Product does not present an acute toxicity hazard based on known information
<b>Inhalation</b>	There is no data available for this product.
<b>Eye contact</b>	There is no data available for this product.
<b>Skin contact</b>	There is no data available for this product.
<b>Ingestion</b>	There is no data available for this product.

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
LIMONENE 5989-27-5	4400 mg/kg ( Rat )	2000 mg/kg ( Rabbit )	-
BETA PINENE 127-91-3	= 4700 mg/kg ( Rat )	-	-
CITRAL 5392-40-5	4950 mg/kg ( Rat )	2250 mg/kg ( Rabbit ) 2000 mg/kg ( Rat )	-
MYRCENE 123-35-3	> 5 g/kg ( Rat )	> 5 g/kg ( Rabbit )	-

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.  
**Germ Cell Mutagenicity** No information available.  
**Carcinogenicity** This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

Chemical Name	ACGIH	IARC	NTP	OSHA
LIMONENE 5989-27-5		Group 3		

*IARC (International Agency for Research on Cancer)  
Group 3 - Not Classifiable as to Carcinogenicity in Humans*

**Reproductive toxicity** No information available.  
**Specific target organ systemic toxicity (single exposure)** No information available.  
**Specific target organ systemic toxicity (repeated exposure)** No information available.

**Chronic toxicity** Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure.

**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document

. mg/kg > 5000 mg/kg  
**Dermal LD50** > 10,000 mg/kg

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Very toxic to aquatic life with long lasting effects

2% of the mixture consists of component(s) of unknown hazards to the aquatic environment

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

Chemical Name	log Pow
CITRAL 5392-40-5	2.76

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment**

**Waste Disposal Methods** Dispose of in accordance with local regulations.

**Contaminated packaging** Do not reuse container.

**US EPA Waste Number** D001

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
LIMONENE 5989-27-5	Toxic

**14. TRANSPORT INFORMATION**

**DOT/ADR**

UN/ID No 1993  
 Proper shipping name Flammable Liquid, N.O.S. (Limonene)  
 Hazard class 3  
 Packing Group III  
 ERG Code 128

**ICAO/IATA**

UN/ID No 1993  
 Proper shipping name Flammable Liquid, N.O.S. (Limonene)  
 Hazard class 3  
 Packing Group III

**IMDG / IMO**

UN/ID No 1993  
 Proper shipping name Flammable Liquid, N.O.S. (Limonene)

**Hazard class** 3  
**Packing Group** III  
**Marine pollutant** This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO

**15. REGULATORY INFORMATION**

**International Inventories**

TSCA Complies  
 DSL/NDSL Complies  
 EINECS/ELINCS Complies  
 ENCS Complies  
 IECSC Complies  
 KECL Complies  
 PICCS Complies  
 AICS Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

**Acute Health Hazard** Yes  
**Chronic Health Hazard** no  
**Fire Hazard** Yes  
**Sudden Release of Pressure Hazard** no  
**Reactive Hazard** no

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**U.S. State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
MYRCENE - 123-35-3	Carcinogen

**U.S. State Right-to-Know Regulations**



Chemical Name	New Jersey	Massachusetts	Pennsylvania
PINENES 80-56-8	X	X	X

U.S. EPA Label information

**16. OTHER INFORMATION**

<b>NFPA</b>	Health Hazard 2	Flammability 2	Instability 0	Physical and chemical hazards *
<b>HMIS</b>	Health Hazard 2	Flammability 2	Physical Hazard 0	Personal protection B

**Prepared By**

Lotus Brands, Inc.  
1100 E. Lotus Drive  
Silver Lake WI 53181  
PH: (262) 889-8561

**Revision Date** 08-Mar-2019  
**Revision Note** No information available

**Revision#** 6.03

**WARNING/DISCLAIMER:**

Our ingredients have not been tested, nor have they been determined safe, for inhalation or use in any electronic smoking devices, electronic nicotine delivery systems, electronic cigarettes, or other similar devices (collectively "E-Cigarettes") or in any E-Liquids used with E-Cigarettes. By receiving Lotus Brands, Inc. ingredients, the recipient confirms that they will not use these ingredients in connection with the manufacture and distribution of E-Cigarettes, E-Liquids or any component thereof. WE DISCLAIM, TO THE FULLEST EXTENT PERMITTED BY LAW, ALL WARRANTIES, EXPRESS OR IMPLIED, and disclaim all liability in connection with the use of our ingredients in connection with E-Cigarettes and E-Liquids. All such risks are assumed by you and the user.

**Disclaimer**

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.

end



# Cassia oil (Cinnamomum cassia)

## Safety Data Sheet

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

Revision date: 08/19/2020

### SECTION 1: Identification

#### 1.1. Identification

Substance name : Cassia oil (Cinnamomum cassia)  
CAS-No. : 8007-80-5

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Industrial uses: Uses of substances as such or in preparations\* at industrial sites

#### 1.3. Details of the supplier of the safety data sheet

Lotus Brands, Inc.  
1100 E. Lotus Drive  
Silver Lake WI 53181  
PH: (262) 889-8561

#### 1.4. Emergency telephone number

Emergency number : (800) 824-6396

### SECTION 2: Hazard(s) identification

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

##### GHS-US classification

Acute Tox. 4 (Oral)	H302 -	Harmful if swallowed.
Acute Tox. 3 (Dermal)	H311 -	Toxic in contact with skin.
Skin Irrit. 2	H315 -	Causes skin irritation.
Eye Irrit. 2	H319 -	Causes serious eye irritation.
Skin Sens. 1	H317 -	May cause an allergic skin reaction.

Full text of H-statements: see section 16

#### 2.2. Label elements

##### GHS US labelling

Hazard pictograms (GHS US) :



GHS06

GHS07

Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H302 - Harmful if swallowed.  
H311 - Toxic in contact with skin.  
H315 - Causes skin irritation.  
H317 - May cause an allergic skin reaction.  
H319 - Causes serious eye irritation.

Precautionary statements (GHS US) :

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.  
P264 - Wash hands thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product.  
P272 - Contaminated work clothing must not be allowed out of the workplace.  
P280 - Wear protective gloves/protective clothing/eye protection  
P301+P312 - IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.  
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.  
P312 - Call a POISON CENTER/doctor if you feel unwell.  
P321 - Specific treatment (see supplemental first aid instruction on this label).  
P322 - Specific treatment (see supplemental first aid instruction on this label)  
P330 - Rinse mouth.  
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.  
P361+P364 - Take off immediately all contaminated clothing and wash it before reuse.  
P362+P364 - Take off contaminated clothing and wash it before reuse.  
P363 - Wash contaminated clothing before reuse.  
P405 - Store locked up.

# Cassia oil (Cinnamomum cassia)

## Safety Data Sheet

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

P501 - Dispose in a safe manner in accordance with local/national regulations

### 2.3. Other hazards

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Substance type : UVCB  
Name : Cassia oil (Cinnamomum cassia)  
CAS-No. : 8007-80-5

Name	Product identifier	%	GHS-US classification
CINNAMIC ALDEHYDE	(CAS-No.) 104-55-2	>= 80	Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1A, H317
Benzaldehyde	(CAS-No.) 100-52-7	1 - 5	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:vapour), H332 Eye Irrit. 2, H319 STOT SE 3, H335
CINNAMIC ALCOHOL	(CAS-No.) 104-54-1	1 - 5	Skin Sens. 1B, H317

Full text of H- and EUH-statements: see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Unconscious: maintain adequate airway and respiration. Check the vital functions. Vomiting: prevent asphyxia/aspiration pneumonia. Respiratory arrest: artificial respiration or oxygen. Prevent cooling by covering the victim (no warming up). Keep the victim calm, avoid physical strain. Keep watching the victim. Give psychological aid. Cardiac arrest: perform resuscitation. Call a POISON CENTER/doctor. Call a poison center or a doctor if you feel unwell. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Remove victim to fresh air. Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Wash immediately with lots of water (15 minutes)/shower. Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention. Immediately call a POISON CENTER/doctor. Specific measures (see supplemental first aid instruction on this label). Wash with plenty of water/.... Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label). If skin irritation or rash occurs:

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Do not apply (chemical) neutralizing agents. Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Ingestion of large quantities: immediately to hospital. Rinse mouth with water, do not induce vomiting, call a doctor. Give nothing or a little water to drink. Call a poison center or a doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

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

Symptoms/effects after skin contact : Tingling/irritation of the skin. Irritation. May cause an allergic skin reaction. Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin. Causes skin irritation.

Symptoms/effects after eye contact : Irritation of the eye tissue. Eye irritation. Causes serious eye irritation.

Chronic symptoms : Skin rash/inflammation.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

# Cassia oil (Cinnamomum cassia)

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide. Sand.  
Unsuitable extinguishing media : None. Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : No data available.  
Explosion hazard : No data available.  
Reactivity : On combustion, forms: carbon oxides (CO and CO<sub>2</sub>).

#### 5.3. Advice for firefighters

Precautionary measures fire : Keep upwind. Consider evacuation.  
Firefighting instructions : Use water moderately and if possible collect or contain it. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.  
Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Do not enter fire area without proper protective equipment, including respiratory protection.

### SECTION 6: Accidental release measures

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

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

Protective equipment : Gloves. Large spills/in enclosed spaces: gas-tight suit. Face shield. Large spills/in enclosed spaces: compressed air apparatus. Protective clothing.  
Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Mark the danger area. Wash contaminated clothes. Large spills/in confined spaces: consider evacuation. Avoid contact with skin, eyes and clothing. Avoid breathing dust/fume/gas/mist/vapours/spray. Evacuate unnecessary personnel.

##### 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". Equip cleanup crew with proper protection.  
Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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

For containment : Dam up the liquid spill. Stop leak without risks if possible. Contain leaking substance, pump over in suitable containers.  
Methods for cleaning up : Large spills: scoop solid spill into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling. Damaged/cooled tanks must be emptied. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.  
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. See Heading 8. Exposure controls and personal protection.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Do not discharge the waste into the drain. Comply with local regulations for disposal. Keep container tight closed. Keep away from sources of ignition - No smoking. Remove contaminated clothing. Measure the concentration in the atmosphere. Carry out operations in the open/under local exhaust/ventilation or with respiratory protection. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.  
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. Wash hands thoroughly after handling.

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

Storage conditions	: Store in a well-ventilated place. Keep cool. Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.
Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight.
Heat and ignition sources	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Storage area	: Meet the legal requirements. Store in a dark area. Provide for a tub to collect spills. Keep out of direct sunlight.
Special rules on packaging	: Clean. Hermetical. Meet the legal requirements. opaque.
Packaging materials	: No data available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Personal protective equipment	: Avoid all unnecessary exposure.
Materials for protective clothing	: No data available.
Hand protection	: Gloves. Wear protective gloves/protective clothing/eye protection protective gloves.
Eye protection	: Face shield. Safety glasses. Chemical goggles or safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. In case of inadequate ventilation wear respiratory protection. Gas mask with filter type. Wear appropriate mask.
Environmental exposure controls	: Avoid release to the environment.
Other information	: Do not eat, drink or smoke when using this product. Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Appearance	: Liquid.
Colour	: Yellow-brown
Odour	: characteristic
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	: 194 °F
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Vapour pressure	: 0.1 mm Hg 20°C
Relative density	: 1.054
Relative vapour density at 20 °C	: No data available
Solubility	: Soluble in oil. Poorly soluble in water. Water: Poorly soluble in water
Log Pow	: No data available
Auto-ignition temperature	: No data available

# Cassia oil (Cinnamomum cassia)

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Decomposition temperature	: No data available
Viscosity	: < 20.5 mm <sup>2</sup> /s
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

### 9.2. Other information

Other properties : Gas/vapour heavier than air at 20°C.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

On combustion, forms: carbon oxides (CO and CO<sub>2</sub>).

### 10.2. Chemical stability

Stable under normal conditions. Not established.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

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

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

<b>Cassia oil (Cinnamomum cassia) (8007-80-5)</b>	
ATE US (oral)	500 mg/kg bodyweight
ATE US (dermal)	300 mg/kg bodyweight
<b>CINNAMIC ALDEHYDE (104-55-2)</b>	
ATE US (dermal)	1100 mg/kg bodyweight
<b>Benzaldehyde (100-52-7)</b>	
ATE US (oral)	500 mg/kg bodyweight
ATE US (vapours)	11 mg/l/4h

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Harmful in contact with skin.
Symptoms/effects after inhalation	: May cause an allergic skin reaction.
Symptoms/effects after skin contact	: Tingling/irritation of the skin. Irritation. May cause an allergic skin reaction. Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful

# Cassia oil (Cinnamomum cassia) in contact with skin. Causes skin irritation.

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Symptoms/effects after eye contact : Irritation of the eye tissue. Eye irritation. Causes serious eye irritation.  
Chronic symptoms : Skin rash/inflammation.

### 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.  
Ecology - water : No data available.

#### CINNAMIC ALDEHYDE (104-55-2)

LC50 fish 1	> 10 mg/l (96 h; Pisces)
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#### CINNAMIC ALCOHOL (104-54-1)

LC50 fish 1	> 10 mg/l (96 h; Pisces; Estimated value)
EC50 Daphnia 1	> 10 mg/l (48 h; Daphnia magna; Estimated value)

#### 12.2. Persistence and degradability

##### Cassia oil (Cinnamomum cassia) (8007-80-5)

Persistence and degradability	No data available. Not established.
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##### CINNAMIC ALDEHYDE (104-55-2)

Persistence and degradability	Readily biodegradable in water. Not established.
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##### Benzaldehyde (100-52-7)

Persistence and degradability	Not established.
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##### CINNAMIC ALCOHOL (104-54-1)

Persistence and degradability	Readily biodegradable in water. Not established.
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#### 12.3. Bioaccumulative potential

##### Cassia oil (Cinnamomum cassia) (8007-80-5)

Bioaccumulative potential	No data available. Not established.
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##### CINNAMIC ALDEHYDE (104-55-2)

Log Pow	1.9 - 2.22
Bioaccumulative potential	Low bioaccumulation potential. Not established.

##### Benzaldehyde (100-52-7)

Bioaccumulative potential	Not established.
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##### CINNAMIC ALCOHOL (104-54-1)

Log Pow	1.95
Bioaccumulative potential	Not established. Low bioaccumulation potential.

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

Other information : Avoid release to the environment.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose in a safe manner in accordance with local/national regulations.  
Additional information : Hazardous waste.  
Ecology - waste materials : Avoid release to the environment.

### SECTION 14: Transport information

#### Department of Transportation (DOT)

In accordance with DOT  
Transport document description : UN2810 Toxic, liquids, organic, n.o.s. (Cassia Oil), 6.1, III



# Cassia oil (Cinnamomum cassia)

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UN-No.(DOT)	: UN2810
Proper Shipping Name (DOT)	: Toxic, liquids, organic, n.o.s. Cassia Oil
Class (DOT)	: 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132
Hazard labels (DOT)	: 6.1 - Poison



Packing group (DOT)	: III - Minor Danger
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 241
DOT Symbols	: G - Identifies PSN requiring a technical name
DOT Special Provisions (49 CFR 172.102)	: IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T7 - 4 178.274(d)(2) Normal. .... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / (1 + a (tr - tf))$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 153
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 220 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other	: 40 - Stow "clear of living quarters"
Emergency Response Guide (ERG) Number	: 153
Other information	: No supplementary information available.

### Transportation of Dangerous Goods

No additional information available

### Transport by sea

UN-No. (IMDG)	: 2810
Proper Shipping Name (IMDG)	: TOXIC LIQUID, ORGANIC, N.O.S.
Class (IMDG)	: 6.1 - Toxic substances
Packing group (IMDG)	: III - substances presenting low danger

### Air transport

UN-No. (IATA)	: 2810
Proper Shipping Name (IATA)	: Toxic liquid, organic, n.o.s.
Class (IATA)	: 6.1 - Toxic Substances
Packing group (IATA)	: III - Minor Danger

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### Cassia oil (Cinnamomum cassia) (8007-80-5)

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

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### CINNAMIC ALDEHYDE (104-55-2)

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

### Benzaldehyde (100-52-7)

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

### CINNAMIC ACID (621-82-9)

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

### CINNAMIC ALCOHOL (104-54-1)

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

### Coumarin (91-64-5)

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

## 15.2. International regulations

### CANADA

### CINNAMIC ALDEHYDE (104-55-2)

Listed on the Canadian DSL (Domestic Substances List)

### EU-Regulations

No additional information available

### National regulations

No additional information available

## 15.3. US State regulations

### Benzaldehyde (100-52-7)

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

## SECTION 16: Other information

Revision date	: 08/19/2020
Data sources	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Other information	: None.

Full text of H-statements:

H227	Combustible liquid
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

# Cassia oil (Cinnamomum cassia)

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Hazard Rating	
Health	: 2 Moderate Hazard - Temporary or minor injury may occur
Flammability	: 2 Moderate Hazard - Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100 F but below 200 F. (Classes II & IIIA)
Physical	: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
Personal protection	: B B - Safety glasses, Gloves

*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.*