



SAFETY DATA SHEET

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

Revision Number 11
Revision date 07-Aug-2020
Issuing Date 19-Aug-2020

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Code 11300010
Product Name Lavender EO

CAS No 8000-28-0

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 2A
Skin sensitization	Category 1B
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 irritation
May cause an allergic skin reaction
May be fatal if swallowed and enters airways
Combustible liquid

**Appearance** Pale yellow**Physical state** Liquid**Odor** Characteristic**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing must not be allowed out of the workplace

Keep away from flames and hot surfaces. - No smoking

Wear protective gloves/eye protection/face protection

Precautionary Statements - Response

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

If eye irritation persists: Get medical advice/attention

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 CO₂, 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

Harmful 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	30 - 40	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)
cis-beta-Ocimene	3338-55-4	5.0 - 10	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-Caryophyllene	87-44-5	5.0 - 10	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)
1,4-Cineole	470-67-7	1.0 - 5.0	Flam. Liq. 3 (H226) Acute Tox. Oral 5 (H303)
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)
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)
Eucalyptol	470-82-6	1.0 - 5.0	Flam. Liq. 3 (H226) Acute Tox. Oral 5 (H303) Skin Irrit. 3 (H316) Skin Sens. 1B (H317)
Limonene	5989-27-5	0.1 - 1.0	Flam. Liq. 3 (H226) Skin Irrit. 2 (H315) Skin Sens. 1B (H317) Asp. Tox. 1 (H304) Aquatic Acute 1 (H400) Aquatic Chronic 3 (H412)
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)
beta-Pinene	127-91-3	0.1 - 1.0	Flam. Liq. 3 (H226) Skin Irrit. 2 (H315) Skin Sens. 1B (H317) Asp. Tox. 1 (H304) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)

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

4. FIRST AID MEASURES

Description of first aid measures

General advice

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Inhalation

Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. 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 medical attention if irritation develops and persists.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.
Ingestion	ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. 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 direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms	Itching. Rashes. Hives. Difficulty in breathing. Coughing and/ or wheezing. Dizziness. May cause redness and tearing of the eyes. Burning sensation.
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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

Suitable Extinguishing Media Large Fire	Dry chemical. Carbon dioxide (CO ₂). Water spray. Alcohol resistant foam. CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
Specific hazards arising from the chemical	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.
Explosion data Sensitivity to mechanical impact	None.
Sensitivity to static discharge	Yes.
Special protective equipment for fire-fighters	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

Personal precautions	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.
Other information	Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment	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.
Methods for cleaning up	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**

Advice on safe handling	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. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.
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Conditions for safe storage, including any incompatibilities

Storage Conditions	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
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Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
beta-Pinene 127-91-3	dermal sensitizer TWA: 20 ppm	-	-

Appropriate engineering controls

Engineering controls	Showers Eyewash stations Ventilation systems.
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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. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.
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9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Pale yellow
Odor	Characteristic
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH		No information available
Melting point / freezing point		No information available
Boiling point / boiling range	> 35 °C	No information available
Flash point	76 °C / 168 °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	0.8790-0.8880	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

Other information

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

Inhalation

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.

Eye contact	Specific test data for the substance or mixture is not available. Irritating to eyes. (based on components). Causes serious eye irritation.
Skin contact	May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. 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.
Ingestion	Specific test data for the substance or mixture is not available. 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. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Itching. Rashes. Hives. Difficulty in breathing. Coughing and/ or wheezing. Dizziness. Redness. 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)	> 5000 mg/kg
ATEmix (dermal)	> 5000 mg/kg

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

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

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life. Harmful 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.
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Contaminated packaging	Do not reuse empty containers.
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14. TRANSPORT INFORMATION

<u>DOT</u>	Not regulated
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<u>IATA/ICAO</u>	Not regulated
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<u>IMDG/IMO</u>	Not regulated
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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

Product code EUC0002
Product name EUCALYPTUS OIL

This safety data sheet complies with the requirements of:
US OSHA Hazard Communication Standard (29 CFR 1910.1200)

Issue date 15-Sep-2021

Revision date 15-Sep-2021

Version 15

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier

Product name EUCALYPTUS OIL

Other means of identification

Product code EUC0002
UN/ID no 1169
Synonyms INCI: Eucalyptus globulus oil
Registration number(s) 8000-48-4 / 92502-70-0 / 97926 40-4 / 84625-32-1

Recommended use of the chemical and restrictions on use

Recommended Use Industry Use.
Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address

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

Emergency telephone number

Company Phone Number (800) 824-6396

2. Hazards Identification

Classification

Skin corrosion/irritation	Category 2
Skin sensitization	Category 1B
Reproductive toxicity	Category 2
Aspiration toxicity	Category 1
Flammable liquids	Category 3

Label Elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Causes skin irritation
May cause an allergic skin reaction

Suspected of damaging fertility or the unborn child
May be fatal if swallowed and enters airways
Flammable liquid and vapor



Appearance Clear

Physical state Liquid

Odor Characteristic odor

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. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace. Keep away from heat/sparks/open flames/hot surfaces. - 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.

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention. Specific treatment (see .? on this label).

IF skin irritation or rash occurs: Get medical advice/attention. IF ON SKIN (or hair): 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. Do NOT induce vomiting.

In case of fire: Use CO2, 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.

Hazards not otherwise classified (HNOC)

Other Information

- May be harmful if swallowed
 - Toxic to aquatic life with long lasting effects
 - Toxic to aquatic life
- 97.006 % of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/information on Ingredients

Synonyms

INCI: Eucalyptus globulus oil.

Chemical Family

Essential oil.

Chemical Name	CAS No.	Weight-%
Eucalyptus oil	97926-40-4	100

4. First Aid Measures

Description of first aid measures

Eye Contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact

IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Inhalation

Remove to fresh air. If breathing is difficult, give oxygen. Move to fresh air in case of

accidental inhalation of vapors. If not breathing, give artificial respiration.

Ingestion IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

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

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-Fighting Measures

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Flammable. Keep product and empty container away from heat and sources of ignition.

Hazardous combustion products Volatile organic compounds.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge May be ignited by friction, heat, sparks or flames.

Special protective actions for fire-fighters

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. Use personal protective equipment as required.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information. Do not flush into surface water or sanitary sewer system. Prevent product from entering drains.

Methods and material for containment and cleaning up

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

Methods for cleaning up Soak up with inert absorbent material.

7. Handling and Storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Ensure adequate ventilation, especially in confined areas. Wash thoroughly after handling. When using do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities.

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Protect from sunlight. Keep in properly labeled containers.
Incompatible materials	None known based on information supplied.

8. Exposure Controls/Personal Protection

Control parameters

Exposure guidelines

Appropriate engineering controls

Engineering controls	Showers Eyewash stations Ventilation systems.
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Individual protection measures, such as personal protective equipment

Eye/Face Protection	Wear safety glasses with side shields (or goggles). Avoid contact with eyes.
Skin and Body Protection	Avoid contact with skin. Wear protective gloves and protective clothing.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should 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. Ensure adequate ventilation, especially in confined areas.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. When using do not eat, drink or smoke. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Regular cleaning of equipment, work area and clothing is recommended. Avoid breathing (dust, vapor, mist, gas).

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Characteristic odor
Appearance	Clear	Odor threshold	Not applicable
Color	Colorless to almost colorless		
<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>	
pH	Not applicable		
Melting point / freezing point	Not applicable		
Boiling point / boiling range	176 °C / 349.5 °F	(101.3kPa) (REACH)	
Flash Point	45.5 °C / 113.9 °F	GHS	
Evaporation Rate	Not applicable		
Flammability (solid, gas)	Not applicable		
Flammability Limit in Air			
Upper flammability limit:	Not applicable		
Lower flammability limit:	Not applicable		
Vapor pressure	0.253kPa	(25°C) (REACH)	
Vapor Density	Not applicable		
Specific gravity	Not applicable		
Water solubility	Not applicable		
Solubility in other solvents	Not applicable		
Partition coefficient	4.35 log Pow	n-octanol/water (25°C) (REACH)	
Autoignition Temperature	255 °C / 491 °F	(101.3kPa)	

Decomposition temperature	Not applicable
Kinematic viscosity	No data available
Dynamic viscosity	Not applicable
Explosive properties	Not applicable
Oxidizing properties	Not applicable

Other Information

Softening point	not applicable
Molecular weight	Not applicable
VOC content (%)	Not applicable
Density	0.927 g/cm ³ (20°C) (REACH)
Bulk Density	Not applicable

10. Stability and Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight. 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****Product Information**

Inhalation	Avoid breathing vapors or mists.
Eye Contact	Avoid contact with eyes.
Skin contact	Avoid contact with skin. Causes skin irritation. May cause an allergic skin reaction.
Ingestion	May be harmful if swallowed.

Component Information**Information on toxicological effects**

Symptoms	No information available.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Irritating to skin.
Serious eye damage/eye irritation	Causes serious eye irritation.
Sensitization	May cause sensitization by skin contact.
Germ cell mutagenicity	Not classified.

Carcinogenicity	This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
Reproductive toxicity	Suspected of damaging fertility or the unborn child. gamma-Terpinene. para-Cymene.
STOT - single exposure	Not classified.
STOT - repeated exposure	Not classified.
Aspiration hazard	May be fatal if swallowed and enters airways.

Numerical measures of toxicity - Product Information

Unknown acute toxicity	97.006 % of the mixture consists of ingredient(s) of unknown toxicity
The following values are calculated based on chapter 3.1 of the GHS document .	
ATEmix (oral)	4440 mg/kg

12. Ecological Information

This product contains a chemical which, although not listed, meets the IMDG criteria for being a severe marine pollutant.

Ecotoxicity

Toxic to aquatic life with long lasting effects

2.569 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Persistence and degradability

Readily biodegradable.

Bioaccumulation

Low potential for bioaccumulation.

Other adverse effects

No information available

13. Disposal Considerations**Waste treatment methods**

Disposal of wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Do not reuse container.
US EPA Waste Number	D001

14. Transport Information**DOT**

UN/ID no	1169
Proper Shipping Name	Extracts, Aromatic, Liquid
Hazard Class	3
Packing group	III
Marine pollutant	This product contains a chemical which, although not listed, meets the IMDG criteria for being a severe marine pollutant.

TDG

UN/ID no	1169
Proper Shipping Name	Extracts, Aromatic, Liquid
Hazard Class	3
Packing group	III

MEX

UN/ID no	1169
Proper Shipping Name	Extracts, Aromatic, Liquid
Hazard Class	3
Packing group	III

ICAO (air)

UN/ID no	1169
Proper Shipping Name	Extracts, Aromatic, Liquid
Hazard Class	3
Packing group	III

IATA

UN/ID no	1169
Proper Shipping Name	Extracts, Aromatic, Liquid
Hazard Class	3
Packing group	III
ERG Code	3L

IMDG

UN/ID no	1169
Proper Shipping Name	Extracts, Aromatic, Liquid
Hazard Class	3
Packing group	III
EmS-No	F-E, S-D
Marine pollutant	This material meets the definition of a marine pollutant

RID

UN/ID no	1169
Proper Shipping Name	Extracts, Aromatic, Liquid
Hazard Class	3
Packing group	III

ADR

UN/ID no	1169
Proper Shipping Name	Extracts, Aromatic, Liquid
Hazard Class	3
Packing group	III
Classification code	F1
Tunnel restriction code	(D/E)
Labels	3, Marine Pollutant

ADN

UN number	1169
Proper Shipping Name	Extracts, Aromatic, Liquid
Hazard Class	3
Packing group	III

15. Regulatory Information

Not Regulated

16. Other Information

Issue date	29-Jun-2016
Revision date	15-Sep-2021

Revision note

No information available

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. This material has not been tested or proven safe for inhalation. With this document, Phoenix LLC only attests to the safety of the product when used in the appropriate and suitable fragrance/flavor industry application.

Classification and labeling according to the IFRA/IOFI labeling Manual 2020.

End of Safety Data Sheet

PEPPERMINT YAKIMA REDISTILLED

Safety Data Sheet

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

Issue date: 06/14/2017

Revision date: 07/19/2021

Supersedes: 05/19/2020

Version: 2.4

SECTION 1: Identification

1.1. Identification

Product form : Substance
Product name : PEPPERMINT YAKIMA REDISTILLED
CAS-No. : 8006-90-4
Product code : 50-6225-21

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 4	Combustible liquid
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)



Signal word (GHS US)

: Danger

Hazard statements (GHS US)

: Combustible liquid
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.
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.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present 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.

PEPPERMINT YAKIMA REDISTILLED

Safety Data Sheet

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

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
PEPPERMINT OIL	(CAS-No.) 8006-90-4	100	Flam. Liq. 4, H227 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 : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : 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 : Combustible liquid.
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. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.

PEPPERMINT YAKIMA REDISTILLED

Safety Data Sheet

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

6.1.2. For emergency responders

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

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

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

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

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.

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

7.2. Conditions for safe storage, including any incompatibilities

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

PEPPERMINT OIL (8006-90-4)

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

Color : COLORLESS TO PALE YELLOW LIQUID

Odor : CHARACTERISTIC, STRONG PEPPERMINT ODOR

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Safety Data Sheet

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

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	: 74 °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	: 0.902 (0.896 – 0.908)
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	: 28 %
Refractive index	: 1.463 (1.459 – 1.465)

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

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

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified

PEPPERMINT YAKIMA REDISTILLED

Safety Data Sheet

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

STOT-repeated exposure	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.
Viscosity, kinematic	: No data available
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.
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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.
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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

PEPPERMINT OIL (8006-90-4)

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

PEPPERMINT OIL (8006-90-4)

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

15.2. International regulations

CANADA

PEPPERMINT OIL (8006-90-4)

Listed on the Canadian DSL (Domestic Substances List)

PEPPERMINT YAKIMA REDISTILLED

Safety Data Sheet

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

PEPPERMINT OIL (8006-90-4)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

National regulations

No additional information available

15.3. US State regulations



WARNING:

This product can expose you to d-pulegone, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

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.

SECTION 16: Other information

Revision date : 07/19/2021

Full text of H-phrases:

H227	Combustible liquid
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation

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

Version 6.05

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Number 15063
EC-No 232-433-8
CAS-No 8028-48-6; 8008-5-9
FEMA Numbers 2825

Manufacturer Lotus Brands, Inc.
1100 E. Lotus Drive
Silver Lake, WI 53170
PH: (262) 889-8561

Product name OIL ORANGE FLORIDA C.P. MIDSEASON FCC
Pure substance/mixture Natural Complex substance

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

Recommended Use Not for direct consumption

1.3. Details of the supplier of the safety data sheet

1.4. Emergency telephone number

Emergency telephone : (800) 827-6396

2. HAZARD IDENTIFICATION

2.1. Classification of the substance or mixture

Vspiration toxicity	Category 1
Skin corrosion/irritation	Category 2
\$kin sensitization	Category 1
Vcute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1
Flammable liquids	Category 3

Classification according to EU Directives 67/548/EEC or 1999/45/EC
For the full text of the R-phrases mentioned in this Section, see Section 16

Symbol(s)

Xi - Irritant
N - Dangerous for the environment

R-code(s)

R10 - Xi; R38 - R43 - N; R50/53

2.2. Label elements**Signal Word**

Danger

H226 - Flammable liquid and vapor

Precautionary Statements

P280 - Wear eye protection/ face protection

P321 - Specific treatment (see .? on this label)

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician

P331 - Do NOT induce vomiting

P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction

P210 - Keep away from heat sparks/open flames/hot surfaces. - No smoking

2.3. Other information

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Name	EC-No	CAS-No	Alternate CAS#	Weight%	Classification according to Directive 67/548/EEC or 1999/45/EC	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
LIMONENE	227-813-5	5989-27-5		90-100%	R10, XI; R38, XI; R43, N; RS0/53;	Aquatic Acute 1 (H400) Skin Sens. 1 (H317) Skin Irrit. 2 (H315) Asp. Tox. 1 (H304) Aquatic Chronic 1 (H410) Flam. Lia. 3 (H226)	No data available

For the full text of the R-phrases mentioned in this Section, see Section 16

4. FIRST AID MEASURES

4.1. Description of first aid measures**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

If symptoms persist, call a physician Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes 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

Skin contact	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 removal of all contaminated clothes and shoes.
Ingestion	Do NOT induce vomiting. Drink plenty of water. Immediate medical attention is not required. Rinse mouth. Clear mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.
Inhalation	If symptoms persist call a physician. Move to fresh air. 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.
Self-protection of the first aider	Remove all source of ignition Use personal protective equipment

4.2. Most important symptoms and effects both acute and delayed**4.3. Indication of any immediate medical attention and social treatment needed**

Note to physicians Treat symptomatically May cause, sensitization in susceptible persons

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media**Suitable Extinguishing Media**

Use Dry chemical Carbon dioxide CO₂ Water spray Alcohol-resistant foam

Extinguishing media which shall not be used for safety reasons

No information available

5.2. Social hazards arising from the substance or mixture**Special Hazard**

None

5.3. Advice for firefighters**Special protective equipment for fire-fighters**

As in any fire, wear self-contained breathing apparatus and full protective gear

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions protective equipment and emergency procedures

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.

See Section 12 for additional Ecological Information

6.2. 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.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust)

7. HANDLING AND STORAGE

7.1. Precautions for 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).

7.2. Conditions for safe storage, including any incompatibilities

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.

7.3 Specific end use(s)

Exposure scenario N/A

Other Guidelines N/A

8. EXPOSURE CONTROL PERSONAL PROTECTION

8.1. Control parameters

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

Chemical Name	European Union	The United Kingdom	France	Spain	Germany
LIMONENE 5989-27-5					MAK: 20 ppm MAK: 110 mg/m ³ Ceiling / Peak: 40 ppm Ceiling / Peak: 220 mg/m ³ TWA: 20 ppm TWA: 110 mg/m ³

Chemical Name	Italy	Portugal	The Netherlands	Finland	Denmark
LIMONENE 5989-27-5				TWA: 25 ppm TWA: 140 mg/m ³ STEL: 50 ppm STEL: 280 mg/m ³	

Chemical Name	Austria	Sweden - Occupational Exposure Limits - TLVs (LLVs)	Switzerland	Poland	Norway
LIMONENE 5989-27-5			STEL: 40 ppm STEL: 220 mg/ml MAK: 20 ppm MAK: 110 mg/m ³		TWA: 25 ppm TWA: 140 mg/m ³ STEL: 37.5 ppm STEL: 175 mg/m ³

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

8.2. Exposure controls

Engineering Controls Ensure adequate ventilation, especially in confined areas

Personal protective equipment**Eye Protection**

Tightly fitting safety goggles

Hand Protection

Protective gloves

Skin and body protection

Antistatic boots Wear fire/ flame resistant retardant clothing Impervious gloves Long sleeved clothing Apron Chemical resistant apron

Respiratory protection

When workers are experiencing concentrations above the exposure limit they must use appropriate certified respirators

General Hygiene Considerations

When using, do not eat, drink or smoke Provide regular cleaning of equipment, work area and clothing

Environmental Exposure Controls

Do not allow material to contaminate ground water system

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Physical state	liquid	Appearance	clear
Aroma	characteristic of the outer part of fresh orange peel	Color	intensely yellow, orange or deep orange
<u>Property</u>	<u>Values</u>	<u>Method</u>	
pH		No information available	
Melting/freezing point	NA	No information available	
Boiling point/boiling range	NA	FCC Method	
Flash Point	45 °C 113 °F	Closed cup	
Evaporation rate		FCC Method	
Flammability (solid, gas)		No information available	
Flammability Limits in Air		No information available	
Upper flammability limit			
lower flammability limit			
Vapor pressure mm Hg 20°C		No information available	
Vapor density		No information available	
Relative density		No information available	
Specific Gravity @ 25C	0.8420 - 0.8460	FCC Method	
Specific Gravity @ 20C	0.8450 - 0.8490	FCC Method	
Refractive Index @ 20C	1.4720 - 1.4740	FCC Method	
Water solubility		No information available	
Partition coefficient: n-octanol/water		No information available	
Autoignition temperature		No information available	
Decomposition temperature		No information available	
Viscosity, dynamic		No information available	
Explosive properties	No information available		
Oxidizing Properties	No information available		

9.2. Other information

VOC Content(%)	95
Molecular Weight	No information available

10. STABILITY AND REACTIVITY**10.1. Reactivity**

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions**10.4. Conditions to avoid**

Heat, flames and sparks

10.5. Incompatible materials

No materials to be especially mentioned

10.6. Hazardous decomposition products

None under normal use conditions

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects**Acute toxicity**

Inhalation	There is no data available for this product
Eye contact	There is no data available for this product
Skin contact	There is no data available for this product
Ingestion	There is no data available for this product
Acute toxicity	5% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document (Rev. 1, 2005):

Oral	4,632.00 mg/kg
Dermal	2,105.00 mg/kg

Skin corrosion/irritation	No information available
Eye damage/irritation	No information available
Sensitization	No information available
Germ Cell Mutagenicity	No information available
Carcinogenicity	No information available

Specific target organ systemic toxicity (single exposure)	No information available
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Specific target organ systemic toxicity (repeated exposure)	No information available
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Target Organ Effects	No information available
-----------------------------	--------------------------

Aspiration hazard	No information available
--------------------------	--------------------------

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity effects	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic
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Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
LIMONENE		0.619-0.796: 96 h Pimephales promelas mg/L LCS0 flow-through 35: 96 h Oncorhynchus mykiss mg/L LCS0	

12.2. Persistence and degradability

No information available

12.3. Bioaccumulate potential

No information available

12.4. Mobility in soil

No information available

12.5. Results of PBT and vPvB assessment**12.6. Other adverse effects**

Endocrine Disruptor Information .? is a suspected endocrine disruptor

13. DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods**

Waste from residues/ unused products	Dispose of in accordance with local regulations
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal
Other Information	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific waste codes should be assigned by the user based on the application for which the product was used

14. TRANSPORT INFORMATION**DOT/ADR**

UN/ID No	Not regulated (If shipped in NON BULK packaging by ground transport) 1993
Proper shipping name	FLAMMABLE LIQUID, N.O.S. (LIMONENE)
Hazard class	3
Packing Group	III
ERG Code	128

IMDG/IMO

Proper shipping name	FLAMMABLE LIQUID, N.O.S. (LIMONENE)
Hazard class	3
UN/ID No	1993
Packing Group	III
Marine pollutant	This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO

ICAO/IATA

UN/ID No	1993
Proper shipping name	FLAMMABLE LIQUID, N.O.S. (LIMONENE)
Hazard class	3

Packing Group
Marine Pollutant

III
P

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

WGK Classification

International Inventories

All of the components in the product are on the following inventory lists: United States of America (TSCA), Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), Korea (ECL), China (IECSC), Japan (ENCS), Philippines (PICCS).

TSCA	Complies
EINECS/ELINCS	Complies
DSUNDSL	Complies
PICCS	Complies
ENCS	Complies
IECSC	Complies
AICS	Complies
KECL	Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

15.2. Chemical safety assessment

16. OTHER INFORMATION

Risk Combination Phrases

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Full text of H-Statements referred to under sections 2 and 3

H400 - Very toxic to aquatic life H317 - May cause an allergic skin reaction H316 - Causes mild skin irritation H304 - May be fatal if swallowed and enters airways H410 - Very toxic to aquatic life with long lasting effects H226 - Flammable liquid and vapor

Prepared By Lotus Brands, Inc.
1100 E. Lotus Drive
Silver Lake, WI
(410) 273-9500

Revision Date 08-Mar-2019

Revision Note Not applicable.

Revision# 6.05

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

WARNING/DISCLAIMER:

This ingredient(s) has not been tested, nor has it been deemed safe, for inhalation or use in electronic smoking devices electronic nicotine delivery systems, electronic cigarettes or other similar devices (collectively "E-Cigarettes"). In supplying this ingredient, Lotus Brands, Inc., and by receiving this ingredient recipient confirms, that this ingredient will not be used in connection with the manufacturer and distribution of E-Cigarettes or any component thereof.

Disclaimer

Food ingredients that are safe to be consumed in food products may pose hazards if not handled properly. This product is intended to be used in food products and, not intended to be consumed in its present form. The information provided on this SDS 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 guide for safe handling, usage, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material use in combination with any other material or in any process, unless specified in the text.

