

**SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking**

- 1.1 Product Name:** Lime Essential Oil  
**Product Code:** 302-514X
- 1.2 Intended Use:** Compound used in customer substance/mixture/product.
- 1.3 Supplier:** Majestic Mountain Sage Inc  
2490 S 1350 W  
Nibley, Utah 84321 - United States of America  
T 435.755.0863 - F 435.755.2108  
www.TheSage.com
- 1.4 Emergency Telephone Number**  
No additional information available.

**SECTION 2: Hazards Identification**

**2.1 Classification of the Substance or Mixture**

Flammable Liquids, Category 3	H226: Flammable liquid and vapor.
Acute Oral Toxicity, Category 5	H303: May be harmful if swallowed.
Aspiration Toxicity, Category 1	H304: May be fatal if swallowed and enters airways.
Acute Dermal Toxicity, Category 5	H313: May be harmful in contact with skin.
Skin Corrosion/Irritation, Category 2	H315: Causes skin irritation.
Skin Sensitization, Category 1	H317: May cause an allergic skin reaction.
Eye Damage/Irritation, Category 2	H319: Causes serious eye irritation.
Acute Aquatic Toxicity, Category 1	H400: Very toxic to aquatic life.
Chronic Aquatic Toxicity, Category 1	H410: Very toxic to aquatic life with long lasting effects.

## 2.2 GHS Label Elements, Including Precautionary Statements

### Hazard Pictograms



**Signal Word:** Danger.

### Hazard Statements

H226	Flammable liquid and vapor.
H303	May be harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H313	May be harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

### Precautionary Statements

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P280	Wear eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P321	Specific treatment (see supplemental first aid instructions on this label).
P331	Do NOT induce vomiting.
P370+P378	In case of fire: Use dry sand, dry chemical or alcohol resistant foam for extinction.

## 2.3 Hazards Not Otherwise Classified (HNOC) and Other Information

No information available.

## SECTION 3: Composition/Information on Ingredients

### 3.1 Substances

Chemical Name	EC Number	CAS Number	Weight %	Classification
Limonene	227-813-5	5989-27-5	30-50%	H226; H304; H316; H317; H400; H410
A-Terpineol	202-680-6	98-55-5	5-10%	H227; H303; H315; H319
Pinenes	201-291-9	80-56-8	1-5%	H226; H303; H304; H316; H317; H400; H410
P-Cymene	202-795-7	99-87-6	1-5%	H226; H303; H304; H316; H401; H411
Citral	226-394-6	5392-40-5	1-5%	H227; H303; H313; H316; H317; H401

For full text of H-Statements see Section 16.

## SECTION 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:** Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eyes wide open while rinsing. If symptoms persist, call a physician.
- Skin Contact:** Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
- Ingestion:** Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician. Do not induce vomiting.

**Inhalation:** Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors or decomposition products. If symptoms persist, call a physician.

**Self Protection of the First Aider:** Remove all sources of ignition. Use personal protective equipment.

#### **4.2 Most Important Symptoms and Effects, Both Acute and Delayed**

**Main Symptoms:** No information available.

#### **4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed**

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

### **SECTION 5: Firefighting Measures**

#### **5.1 Extinguishing Media**

**Suitable:** Use dry chemical, Carbon Dioxide (CO<sub>2</sub>), alcohol-resistant foam.

**Unsuitable:** No information available.

#### **5.2 Special Hazards Arising from the Substance or Mixture**

No information available.

#### **5.3 Protective Equipment and Precautions for Firefighters**

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

### **SECTION 6: Accidental Release Measures**

#### **6.1 Personal Precautions, Protective Equipment and Emergency Procedures**

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.

## 6.2 Environmental Precautions

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.

## 6.3 Methods and Material for Containment and Cleaning Up

**Containment:** Prevent further leakage or spillage if safe to do so.

**Cleaning Up:** Dam up. Use personal protective equipment. Cover liquid spill with sand, earth or other non-combustible absorbent material. Take up mechanically and collect in suitable container for disposal. Clean contaminated surface thoroughly. Soak up with inert absorbent material. Pick up and transfer to properly labeled container.

## SECTION 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

**Storage Conditions:** Keep away from heat and sources of ignition. Keep container tightly closed in a cool, well-ventilated place. Keep in properly labeled container.

**Incompatible Products:** None known based on information supplied.

**SECTION 8: Exposure Controls/Personal Protection**

**8.1 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	European Union	The United Kingdom	France	Spain	Germany
Limonene 5989-27-5					MAK: 20 ppm MAK: 110 mg/m <sup>3</sup> Ceiling/Peak: 40 ppm Ceiling/Peak: 220 mg/m <sup>3</sup> TWA: 20 ppm TWA: 110 mg/m <sup>3</sup>
Pinenes 80-56-8				VLA-ED: 20 ppm VLA-ED: 113 mg/m <sup>3</sup>	

Chemical Name	Italy	Portugal	The Netherlands	Finland	Denmark
Limonene 5989-27-5				TWA: 25 ppm TWA: 140 mg/m <sup>3</sup> STEL 50 ppm STEL: 280 mg/m <sup>3</sup>	
Pinenes 80-56-8		TWA: 20 ppm			
P-Cymene 99-87-6					TWA: 25 ppm TWA: 135 mg/m <sup>3</sup>

Chemical Name	Austria	Sweden	Switzerland	Poland	Norway
Limonene 5989-27-5			STEL: 40 ppm STEL: 220 mg/m <sup>3</sup> MAK: 20 ppm MAK: 110 mg/m <sup>3</sup>		TWA: 25 ppm TWA: 140 mg/m <sup>3</sup> STEL: 37.5 ppm STEL: 175 mg/m <sup>3</sup>
Pinenes 80-56-8		25 ppm NGV 150 mg/m <sup>3</sup> NGV			TWA: 25 ppm TWA: 140 mg/m <sup>3</sup> Skin STEL: 37.5 ppm STEL: 175 mg/m <sup>3</sup>
P-Cymene 99-87-6		25 ppm NGV 140 mg/m <sup>3</sup> NGV			

**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. Shower, eyewash stations, and ventilation systems.

## 8.3 Personal Protective Equipment

**Eye/Face Protection:** Tightly fitting safety goggles.

**Skin and Body Protection:** Protective gloves. Chemical resistant apron. Antistatic boots. Wear fire/flame resistant/retardant clothing. Chemical resistant apron and long sleeved clothing.

**Respiratory Protection:** When workers are facing 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.

## SECTION 9: Physical and Chemical Properties

### 9.1 Information on Basic Physical and Chemical Properties

<b>Physical State:</b>	Liquid
<b>Appearance:</b>	Liquid clear
<b>Odor:</b>	Sharp fresh terpene like citrus aroma like lime peel
<b>Odor Threshold:</b>	No information available
<b>Color:</b>	Greenish-yellow
<b>pH:</b>	No information available
<b>Melting Point/Range:</b>	No information available
<b>Freezing Point:</b>	No information available
<b>Initial Boiling Point:</b>	No information available
<b>Boiling Point/Range:</b>	No information available
<b>Flash Point:</b>	114°F / 46°C
<b>Evaporation Rate:</b>	No information available
<b>Flammability Limits in Air:</b>	No information available
<b>Explosive Properties:</b>	No information available
<b>Oxidizing Properties:</b>	No information available
<b>Vapor Pressure @ 20°C:</b>	No information available
<b>Vapor Density:</b>	No information available
<b>Specific Gravity @ 25°C:</b>	0.855 - 0.863
<b>Specific Gravity @ 20°C:</b>	0.858 - 0.866
<b>Refractive Index:</b>	1.474 - 1.477
<b>Water Solubility:</b>	Insoluble in water
<b>Solubility:</b>	No information available
<b>Partition Coefficient:</b>	No information available
<b>Autoignition Temperature:</b>	No information available
<b>Decomposition Temperature:</b>	No information available
<b>Viscosity, Dynamic:</b>	No information available
<b>Molecular Weight:</b>	No information available
<b>VOC Content (%):</b>	58

## SECTION 10: Stability and Reactivity

### 10.1 Reactivity

No information available.

### 10.2 Chemical Stability

Stable under normal conditions.



### 10.3 Possibility of Hazardous Reactions

No information available.

### 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.

<b>SECTION 11: Toxicological Information</b>
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### 11.1 Information on Likely Routes of Exposure

<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.

### 11.2 Information on Toxicological Effects

<b>Symptoms:</b>	No information available.
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### 11.3 Delayed and Immediate Effects as Well as Chronic Effects from Short and Long-term Exposure

<b>Sensitization:</b>	No information available.
<b>Eye Damage/Irritation:</b>	No information available.
<b>Sensitization:</b>	No information available.
<b>Germ Cell Mutagenicity:</b>	No information available.
<b>Carcinogenicity:</b>	No information available.
<b>STOT - Single Exposure:</b>	No information available.
<b>STOT - Repeated Exposure:</b>	No information available.
<b>Target Organ Effects:</b>	No information available.
<b>Aspiration Hazard:</b>	No information available.

### 11.4 Other Information

<b>Acute Toxicity:</b>	34% of the mixture consists of ingredient(s) of unknown toxicity.
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**The Following Values Are Calculated Based on Chapter 3.1 of the GHS Document (Rev. 1, 2005):**

**Oral** 4,095.00 mg/kg  
**Dermal** 2,500.00 mg/kg

**SECTION 12: Ecological Information**

**12.1 Ecotoxicity**

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

<b>Chemical Name</b>	<b>Toxicity to Algae</b>	<b>Toxicity to Fish</b>	<b>Toxicity to Daphnia and Other Aquatic Invertebrates</b>
Limonene		0.619-0.796: 96 h Pimephales promelas mg/L LC50 flow-through 35: 96 h Oncorhynchus mykiss mg/L LC50	
Pinenes		0.28: 96 h Pimephales promelas mg/L LC50 static	41: 48 h Daphnia magna mg/L LC50
Citral	16: 72 h Desmodesmus subspicatus mg/L EC50 19: 96 h Desmodesmus subspicatus mg/L EC50	4.6-10: 96 h Leuciscus idus mg/L LC50 static	7: 48 h Daphnia magna mg/L EC50

**12.2 Persistence and Degradability**

No information available.

### 12.3 Bioaccumulative Potential

No information available.

Chemical Name	log Pow
Pinenes	4.1
P-Cymene	4.1
Citral	2.76

### 12.4 Mobility in Soil

No information available.

### 12.5 Results of PBT and vPvB Assessment

No information available.

### 12.6 Other Adverse Effects

No information available.

## SECTION 13: Disposal Considerations

### 13.1 Waste Treatment Methods

**Waste Disposal Methods:**

Dispose of in accordance with local regulations.

**Contaminated Packaging:**

Empty containers should be taken to an approved waste handling site for recycling or disposal.

## SECTION 14: Transport Information

### 14.1 Transport Information

**DOT/ADR**

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

**UN/ID Number:**

1993

**Proper Shipping Name:**

FLAMMABLE LIQUID, N.O.S. LIMONENE, PINENES)

**Hazard Class:**

3

**Packing Group:**

III

**ERG Code:**

128

### IMDG/IMO

**Proper Shipping Name:** FLAMMABLE LIQUID, N.O.S. (LIMONENE, PINENES)  
**Hazard Class:** 3  
**UN/ID Number:** 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 Number:** 1993  
**Proper Shipping Name:** FLAMMABLE LIQUID, N.O.S. (LIMONENE, PINENES)  
**Hazard Class:** 3  
**Packing Group:** III  
**Marine Pollutant:** P

<b>SECTION 15: Regulatory Information</b>
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#### 15.1 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 Substance  
**IECSC** - China Inventory of Existing chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Phillipines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

<b>SECTION 16: Other Information</b>
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**16.1 Full Text of H-Statements Referred to Under Sections 2 and 3**

H226: Flammable liquid and vapor.	H227: Combustible liquid.
H303: May be harmful if swallowed.	H304: May be fatal if swallowed and enters
H313: May be harmful in contact with skin.	airways.
H315: Causes skin irritation.	H316: Causes mild skin irritation.
H317: May cause an allergic skin reaction.	H319: Causes serious eye irritation.
H400: Very toxic to aquatic life.	H401: Toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.	H411: Toxic to aquatic life with long lasting effects.

**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, Majestic Mountain Sage instructs, and by receiving the ingredient recipient confirms, that this ingredient will not be used in connection with the manufacture and distribution of E-Cigarettes or any component thereof.

**Notes:**

This safety data sheet is based on the properties of the material known at the time the data sheet was issued. The safety data sheet is intended to provide information for a health and safety assessment of the material and the circumstances, under which it is packaged, stored or applied in the workplace. For such a safety assessment holds no responsibility. This document is not intended for quality assurance purposes.