



## Safety Data Sheet

### 01. IDENTIFICATION OF THE SUBSTANCE/PREPARATION & THE COMPANY/UNDERTAKING

#### 1.1 Product Identifier

Product Name		Lime Oil Distilled Conventional			
Biological Definition		Citrus Aurantifolia Oil is the volatile oil obtained from the fruits of the Lime, <i>Citrus aurantifolia</i> , Rutaceae.			
INCI Name		Citrus Aurantifolia Oil			
Synonyms & Trade Names		Lime Oil WI Distilled			
CAS-No	8008-26-2 / 90063-52-8	EC No.	- / 290-010-3	EINECS No.	- / 290-010-3

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

Flavours, Fragrances: Use in accordance with good manufacturing and industrial hygiene practices.

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

Golden Bough Botanicals Inc 12-1585 Cliveden Ave Delta BC V3M 6M1

#### 1.4 Emergency Tel. No.

604-540-8700 (Monday-Friday 8:30 am-4:30 pm)

### 02. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

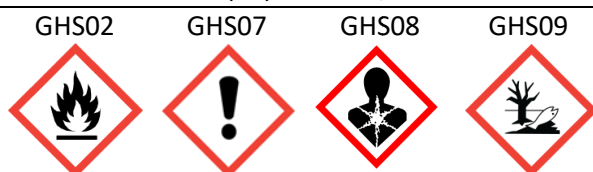
The Full Text for all Hazard Statements displayed in Section 16.

Classification (EC 1272/2008)

Flammable Liquid, Hazard Category 3  
 Skin Corrosion / Irritation Category 2  
 Sensitization - Skin Category 1  
 Aspiration Hazard Category 1  
 Hazardous to the Aquatic Environment - Long-term Hazard Category 2  
 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.  
 H411, Toxic to aquatic life with long lasting effects.

#### 2.2 Label Elements

Label in accordance with (EC) No 1272/2008



Signal Word

Danger.

Contains

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Hazard Statements

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.  
 H411, Toxic to aquatic life with long lasting effects.

#### Precautionary Statements

P210, Keep away from heat, sparks, open flames and hot surfaces. - No smoking.  
 P233, Keep container tightly closed.  
 P240, Ground/bond container and receiving equipment.  
 P241, Use explosion-proof electrical, ventilating and lighting equipment.  
 P242, Use only non-sparking tools.  
 P243, Take precautionary measures against static discharge.  
 P261, Avoid breathing vapour or dust.  
 P264, Wash hands and other contacted skin thoroughly after handling.  
 P272, Contaminated work clothing should not be allowed out of the workplace.  
 P273, Avoid release to the environment.  
 P280, Wear protective gloves/eye protection/face protection.  
 P301/310, IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
 P303/361/353, IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing.  
 Rinse skin with water/shower.  
 P331, Do not induce vomiting.  
 P333/313, If skin irritation or rash occurs: Get medical advice/attention.  
 P362, Take off contaminated clothing and wash before reuse.  
 P370/378, In case of fire:  
 P403/235, Store in a well-ventilated place. Keep cool.  
 P405, Store locked up.  
 P501, Dispose of contents/container to approved disposal site, in accordance with local regulations.

#### Supplementary Precautionary Statements

None.

### 2.3 Other Hazards

PBT or vPvB according to Annex XIII	No additional data available.
Adverse physio-chemical properties	No additional data available.
Adverse effects on human health	No additional data available.

## 03. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

**55.73% d-Limonene** CAS-No: 5989-27-5; EC No.: 227-813-5

Classification (EC 1272/2008) FL 3-SCI 2-SS 1B-AH 1-EH A1-EH C1;H226-H304- H315-H317-H410,-

**17.35% γ-Terpinene (p-mentha-1,4-diene)** CAS No99-85-4 ; EC No: 202-794-6

Classification (EC 1272/2008) FL 3-AH 1;H226-H304,-

**9.65% Terpinolene** CAS No: 586-62-9 EC No: 209-578-0

Classification (EC 1272/2008) SS 1B-AH 1-EH A1-EH C1; H304-H317-H410,-

**8.3% p-Mentha-1,3-diene** CAS No: 99-86-5 EC No: 202-795-1

Classification (EC 1272/2008) FL 3-ATO 4-AH 1-EH C2; H226-H302-H304-H411,-

<b>3.51% p-Cymene</b> CAS No: 99-87-6 EC No: 202-796-7
Classification (EC 1272/2008) FL 3-AH 1-EH C2;H226- H304-H411,-
<b>3.5% Eucalyptol</b> CAS No: 470-82-6 EC No: 207-431-5
Classification (EC 1272/2008) FL 3-SS 1B;H226-H317,-
<b>3.5% 1,4-Cineole</b> CAS No: 470-67-7 EC No: 20-428-9
Classification (EC 1272/2008) FL 3;H226,-
<b>3.475% alpha-Terpineol</b> CAS No: EC No:
Classification (EC 1272/2008) SCI 2-EDI 2;H315-H319,-
<b>2.835% α-Pinene</b> CAS No: 80-56-8 ; EC No: 201-291-9
Classification (EC 1272/2008) FL 3-SCI 2-SS 1B-AH 1-EH A1-EH C1;H226-H304- H315-H317-H410,-
<b>2.665% β-Pinene</b> CAS No: 127-91-3 ; EC No: 20-872-5
Classification (EC 1272/2008). FL 3-SCI 2-SS 1B-AH 1-EH A1-EH C1;H226-H304- H315-H317-H410,-
<b>1.5% Myrcene</b> CAS No: 123-35-3 EC No: 204-622-5
Classification (EC 1272/2008) FL 3-SCI 2-EDI 2-AH 1; H226-H304-H315-H319,-
<b>0.825% l-.beta.-Bisabolene</b> CAS No: 495-61-4 EC No: n/a
Classification (EC 1272/2008) SCI 2-SS 1B-AH 1;H304- H315-H317,
<b>0.736% Citral</b> CAS No: 5392-40-5 EC No: 226-394-6
Classification (EC 1272/2008). SCI 2-EDI 2-SS 1B;H315- H317-H319,-
<b>0.495% Camphene</b> CAS No: 79-92-5 EC No: 201-234-8
Classification (EC 1272/2008) FS 2-EDI 2-EH A1-EH C1; H228-H319-H410,-
<b>0.495% Beta-Caryophyllene</b> CAS No: 87-44-5 EC No: 201-746-1
Classification (EC 1272/2008) AH 1;H304,-
<b>0.495% alpha-Phellandrene</b> CAS No: 99-83-2 EC No: 202-792-5
Classification (EC 1272/2008) FL 3-AH 1;H226-H304,-
<b>0.33% Decanal</b> CAS No: 112-31-2; EC No: 203-872-5
Classification (EC 1272/2008) EDI 2-EH C3;H319-H412,-

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#### **04. FIRST AID MEASURES**

<b>4.1 Description of first aid measures</b>	
Inhalation	Remove from exposure area to fresh air. Obtain medical advice immediately.
Ingestion	Wash mouth out with water and obtain medical advice immediately.
Skin Contact	Remove contaminated clothing. Wash thoroughly with soap and water. Seek medical advice if irritation persists or there is any sign of tissue damage.
Eye Contact	Flush with plenty of water and seek medical advice.
<b>4.2 Most important symptoms and effects, both acute and delayed</b>	
<p>May be fatal if swallowed and enters airways.          Causes skin irritation.          May cause an allergic skin reaction.</p>	
<b>4.3 Indication of any immediate medical attention and special treatment needed</b>	
None expected, see Section 4.1 for further information.	

#### **05. FIRE-FIGHTING MEASURES**

<b>5.1 Extinguishing Media</b>	
Suitable extinguishing media: CO <sub>2</sub> , Dry powder, Foam.	
<b>5.2 Special hazards arising from the product</b>	
In case of fire, Carbon monoxide, Unidentified organic compounds may be liberated.	
<b>5.3 Advice for firefighters</b>	
In case of insufficient ventilation, wear suitable respiratory equipment.	

#### **06. ACCIDENTAL RELEASE MEASURES**

<b>6.1 Personal precautions, protective equipment and emergency procedures</b>	
Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation. Avoid contact with skin and eyes. See protective measures under Section 7 and 8.	
<b>6.2 Environmental Precautions</b>	
Do not discharge into drains, water courses or onto the ground.	
<b>6.3 Methods and material for containment and cleaning up.</b>	
Remove ignition sources. Provide adequate ventilation. Avoid excessive inhalation of vapours. Contain spillage immediately by use of sand or inert powder. Dispose of according to local regulations.	
<b>6.4 Reference to other sections</b>	
See sections 8 and 13.	

#### **07. HANDLING AND STORAGE**

<b>7.1 Precautions for safe handling</b>	
Keep away from heat, sparks, open flames and hot surfaces. - No smoking.	
<b>7.2 Conditions for safe storage, including any incompatibilities</b>	
Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge.	
<b>7.3 Specific end use(s)</b>	

Flavours, Fragrances: Use in accordance with good manufacturing and industrial hygiene practices.

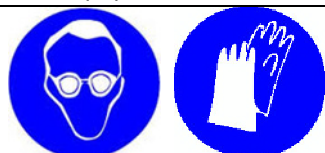
## 08. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Workplace exposure limits: Not Applicable

### 8.2 Exposure controls

Protective Equipment



Process Conditions	Provide eyewash station.
Engineering Measures	Provide adequate ventilation.
Respiratory Equipment	Under normal conditions of use and where adequate ventilation is available to prevent build up of excessive vapour, this material should not require special engineering controls. However, in conditions of high or prolonged use, or high temperature or other conditions which increase exposure, the following engineering controls can be used to minimise exposure to personnel: a) Increase ventilation of the area with local exhaust ventilation. b) Personnel can use an approved, appropriately fitted respirator with organic vapour cartridge or canisters and particulate filters. c) Use closed systems for transferring and processing this material. Also refer to Sections 2 and 7.
Hand Protection	Wear protective gloves/eye protection/face protection.
Eye Protection	Wear protective gloves/eye protection/face protection.
Other Protection	No additional data available.
Hygiene Measures	Good personal hygiene practices are always advisable, especially when working with chemicals / oils. Keep away from foodstuffs, beverages and feed.
Personal Protection	Avoid inhalation and contact with skin and eyes.
Skin Protection	Wear apron or protective clothing in case of splashes.
Environmental Exposure Controls	Avoid discharging into drainage water. Only eliminate by authorised companies.

## 09. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance	Liquid, Virtually colourless to pale yellow / green.
Colour	Virtually colourless to pale yellow / green.
Odour	Characteristic – Fresh, citrus, lime
Relative Density	0.849 – 0.859 @ 20°C
Flash Point (°C)	40
Refractive Index	1.470 to 1.478 @ 20°C
Melting Point (°C)	No additional data available.
Boiling Point (°C)	No additional data available.
Vapour Pressure	No additional data available.
Solubility in Water @20°C	Insoluble in water.
Auto-ignition temperature (°C)	No additional data available.

### 9.2 Other information

No additional data available.

## 10. STABILITY AND REACTIVITY

<b>10.1 Reactivity</b>
Presents no significant reactivity hazards, by itself or in contact with water.
<b>10.2 Chemical stability</b>
Stable under normal temperature and storage conditions and recommended use.
<b>10.3 Possible hazardous reactions</b>
Not expected under normal temperature conditions and recommended use.
<b>10.4 Conditions to Avoid</b>
Avoid extreme heat.
<b>10.5 Incompatible materials</b>
Avoid contact with strong acids, alkalis and oxidising agents.
<b>10.6 Hazardous Decomposition Products</b>
Not expected under normal temperature conditions and recommended use.

## 11. TOXOLOGICAL INFORMATION

<b>11.1 Information on toxicological effects</b>	
Acute Toxicity	Assumed Toxicity Value (LD50 or ATE) for Acute Oral Toxicity: 5934.41 Assumed Toxicity Value (LD50 or ATE) for Acute Dermal Toxicity: n/a Assumed Toxicity Value (LC50 or ATE) for Acute Inhalation Toxicity: n/a Inhalation Route: n/a
Skin corrosion / irritation	Causes skin irritation (H315).
Serious eye damage / irritation	No additional data available.
Respiratory or skin sensitisation	May cause an allergic skin reaction (H317).
Germ Cell Mutagenicity	No additional data available.
Carcinogenicity	No additional data available.
Reproductive toxicity	No additional data available.
STOT-single exposure	No additional data available.
STOT-repeated exposure	No additional data available.
Aspiration hazard	May be fatal if swallowed and enters airways (H304).
Photo-toxicity	No additional data available.
Other Information	No additional data available.

## 12. ECOLOGICAL INFORMATION

<b>12.1 Toxicity</b>
Marine pollutant. Toxic to aquatic life with long lasting effects.
<b>12.2 Persistence &amp; degradability</b>
No additional data available.
<b>12.3 Bioaccumulation Potential</b>
No additional data available.
<b>12.4 Mobility in soil</b>
No additional data available.
<b>12.5 Results of PBT and vPvB Assessment</b>
This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

## 12.6 Other adverse effects

Do not discharge into the environment especially not into waterways, sewers and the sea.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Dispose of in accordance with local regulations. Avoid disposing into drainage systems and into the environment. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. TRANSPORT INFORMATION

### 14.1 UN number

UN No. Road	UN 1169
UN No. SEA	UN 1169
UN No. AIR	UN 1169

### 14.2 UN proper shipping name

Extracts, Aromatic, Liquid.

### 14.3 Transport hazard class(es)

ADR/RID/ADN Class: 3 Flammable Liquid.  
IMDG Class: 3 Flammable Liquid.  
ICAO Class/Division: 3 Flammable Liquid.

Transport Labels



### 14.4 Packing group

ADR/RID/ADN Packing group III  
IMDG Packing group III  
ICAO Packing group III

### 14.5 Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant.



### 14.6 Special precautions for user

No additional data available.

### 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code

No additional data available.

## 15. REGULATORY INFORMATION

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

#### Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

#### Guidance Notes

Workplace Exposure Limits EH40. CHIP for everyone HSG(108).

EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

**15.2 Chemical safety assessment**

No additional information available.

**16. OTHER INFORMATION**

Hazard and/or Precautionary Statements in Full	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. H411, Toxic to aquatic life with long lasting effects.
Other Information	Complies with REACH guidance for SDS as circulated by ECHA 2011.
Revision Date	August 22, 2016
Reason for revision	New SDS
Rev No/Repl, SDS Generated	01

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