



## Safety Data Sheet

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

#### 1.1 Product Identifier

Product Name	Lime Oil Expressed Conventional				
Biological Definition	Essential oil expressed from the epicarps of the Lime, <i>Citrus aurantifolia</i> , Rutaceae..				
INCI Name	Citrus Aurantifolia Peel Oil Expressed				
Synonyms & Trade Names	-				
CAS-No	90063-52-8 / 8008-26-2	EC No.	290-010-3	EINECS No.	290-010-3

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

For manufacturing purposes only.

#### 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 is Displayed in Section 16.

##### Human health

May cause allergic skin reaction and fatal if swallowed.

##### Environment

The product contains a substance which may cause long term adverse effects in the aquatic environment.

##### Physical and Chemical Hazards

This product is flammable

#### Classification (EC 1272/2008)

Physical and Chemical Hazards: Flam. Liq. 3 - H226

Human health: Skin Irrit. 2 - H315; Skin Sens. 1 - H317; Asp. Tox. 1 - H304

Environment: Aquatic Acute 1 - H400; Aquatic Chronic 1 - H410

#### 2.2 Label Elements

Label in accordance with (EC) No 1272/2008



Signal Word

Danger

Contains	Bisabolene, Citral, g-Terpinene, Limonene, pinenes.
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.
H410	Very toxic to aquatic life with long lasting effects
Precautionary Statements	
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331	Do NOT induce vomiting.
P391	Collect spillage.
P501	Dispose of contents/container to ...
Supplementary Precautionary Statements	
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P272	Contaminated work clothing should not be allowed out of the workplace.
P261	Avoid breathing vapour/spray.
P264	Wash contaminated skin thoroughly after handling.
P321	Specific treatment (see medical advice on this label).
P370+378	In case of fire: Use foam, carbon dioxide, dry powder or water fog for extinction.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P332+313	If skin irritation occurs: Get medical advice/attention.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P363	Wash contaminated clothing before reuse.
P403+235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
<b>2.3 Other Hazards</b>	
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

<b>3.2 Mixtures</b>
<b>30-60% Limonene</b> CAS-No.: 5989-27-5 EC No.: 227-813-5  Classification (EC 1272/2008) Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Asp. Tox. 1 - H304 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410
<b>5.0 - 20% g-Terpinene</b> CAS-No.: 99-85-4 EC No.: 202-794-6  Classification (EC 1272/2008) Flam. Liq. 3 - H226 Asp. Tox. 1 - H304

<b>10-30% pinenes</b> CAS-No.: 80-56-8 EC No.: 201-291-9
Classification (EC 1272/2008) Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Asp. Tox. 1 - H304
<b>3-10% Citral</b> CAS-No.: 5392-40-5 EC No.: 226-394-6
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317
<b>1-5% Bisabolene</b> CAS-No.: 495-62-5 EC No.: 207-805-8
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Asp. Tox. 1 - H304
<b>1-5% Myrcene (7-methyl-3-methyleneocta-1,6-diene)</b> CAS-No.: 123-35-3 EC No.: 204-622-5
Classification (EC 1272/2008) Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Asp. Tox. 1 - H304
<b>&lt; 1% Beta Caryophyllene</b> CAS-No.: 87-44-5 EC No.: 201-746-1
Classification (EC 1272/2008) Asp. Tox. 1 - H304
<b>&lt; 1% Geraniol</b> CAS-No.: 106-24-1 EC No.: 203-377-1
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317
<b>&lt; 1% Geranyl Acetate</b> CAS-No.: 105-87-3 EC No.: 203-341-5
Classification (EC 1272/2008) Aquatic Chronic 2 - H411
<b>&lt; 1% Linalool</b> CAS-No.: 78-70-6 EC No.: 201-134-4
Classification (EC 1272/2008) Acute Tox. 5 - H303 Skin Irrit. 2 - H315 Aquatic Acute 3 - H402
<b>&lt; 1% Terpineol</b> CAS-No.: 8000-41-7 EC No.: 232-268-1
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Irrit. 2 - H319

## 04. FIRST AID MEASURES

<b>4.1 Description of first aid measures</b>	
Inhalation	Remove immediately from source of exposure. Seek medical attention if any discomfort continues.
Ingestion	DO NOT INDUCE VOMITING! Immediately rinse mouth and provide fresh air. Drink plenty of water (200-300ml). Seek medical attention.
Skin Contact	Remove contaminated clothing immediately and wash skin with soap and water. Seek medical attention if any discomfort continues.
Eye Contact	Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Seek medical attention immediately. Continue to rinse.
<b>4.2 Most important symptoms and effects, both acute and delayed</b>	
Inhalation: May be fatal if swallowed and enters airways. Skin contact : May cause irritation and stinging	
<b>4.3 Indication of any immediate medical attention and special treatment needed</b>	
No additional data available	

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## 05. FIRE-FIGHTING MEASURES

<b>5.1 Extinguishing Media</b>
Extinguishing media: Carbon dioxide (CO <sub>2</sub> ). Dry Chemical Powder. Foam.
<b>5.2 Special hazards arising from the product</b>
May produce toxic fumes of organic compounds and carbon monoxide.
<b>5.3 Advice for firefighters</b>
Protective equipment for fire-fighters ; wear full protective clothing.


## 06. ACCIDENTAL RELEASE MEASURES

<b>6.1 Personal precautions, protective equipment and emergency procedures</b>
Avoid inhalation of vapours and contact with skin and eyes.
<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.
<b>6.4 Reference to other sections</b>
Wear protective clothing as described in Section 8 of this safety data sheet.

## 07. HANDLING AND STORAGE

<b>7.1 Precautions for safe handling</b>
Keep away from heat, sparks and open flame.
<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>
No additional data available.

## 08. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>8.1 Control parameters</b>	
Linalool (CAS: 78-70-6) Ingredient Comments: No exposure limits noted for ingredient(s).	
<b>8.2 Exposure controls</b>	
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.
Hand Protection	Chemical resistant gloves (PVC)
Eye Protection	Wear approved safety goggles.
Other Protection	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.
Hygiene Measures	Good personal hygiene practices are always advisable, especially when working with chemicals / oils.
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
Colour	Dark yellow to light brown to greenish
Odour	Characteristic
Relative Density	0.845 – 0.870 @ 20°C
Flash Point (°C)	34
Refractive Index	1.470 - 1.485 @ 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	No additional data available
Auto-ignition temperature (°C)	No additional data available.

### 9.2 Other information

No additional data available.

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

It presents no significant reactivity hazards, by itself or in contact with water.

### 10.2 Chemical stability

Stable under the recommended handling and storage conditions.

### 10.3 Possible hazardous reactions

This material does not undergo any dangerous reactions under normal conditions.

### 10.4 Conditions to Avoid

Avoid heat, flames and other sources of ignition.

### 10.5 Incompatible materials

Avoid strong acids, alkalis and other oxidising agents

### 10.6 Hazardous Decomposition Products

Not expected

## 11. TOXOLOGICAL INFORMATION

11.1 Information on toxicological effects	
Acute Toxicity	Acute Toxicity (Oral LD50) > 5000
Skin corrosion / irritation	Causes skin irritation. May cause an allergic skin reaction.
Serious eye damage / irritation	No additional data available.
Respiratory or skin sensitisation	No additional data available.
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	No additional data available.
Photo-toxicity	No additional data available.
Other Information	No additional data available.

## 12. ECOLOGICAL INFORMATION

12.1 Toxicity	
The product is very toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.	
12.2 Persistence & degradability	
No additional data available.	
12.3 Bioaccumulation Potential	
No additional data available.	
12.4 Mobility in soil	
No additional data available.	
12.5 Results of PBT and vPvB Assessment	
This substance does not meet the PBT/vPvB criteria of REACH, annex XIII	
12.6 Other adverse effects	
Do not allow product to enter streams, sewers or other waterways.	

## 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods	
Collect and dispose of waste product at an authorised disposal facility. Product remainders should not intrude soil or waters.	

## 14. TRANSPORT INFORMATION

14.1 UN number	
UN No. Road	1169
UN No. SEA	1169
UN No. AIR	1169
14.2 UN proper shipping name	
EXTRACTS, AROMATIC, LIQUID	
14.3 Transport hazard class(es)	
ADR/RID/ADN Class:	Class 3 - Flammable liquids
IMDG Class:	Class 3

ICAO Class/Division: 3

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

EMS:	F-E-S-D
Emergency Action Code	3Y
Hazard No. (ADR)	30 Flammable liquid (flash-point between 23°C and 60°C, inclusive) or flammable liquid or solid in the molten state with a flash-point above 60°C, heated to a temperature equal to or above its flash-point, or self heating liquid.
Tunnel Restriction Code	(D/E)

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

Tariff Number 33012941

### 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).

##### Approved Code of Practise

Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations.

##### Guidance Notes

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	H318 Causes serious eye damage. H319 Causes serious eye irritation. H315 Causes skin irritation. H226 Flammable liquid and vapour. H402 Harmful to aquatic life. H304 May be fatal if swallowed and enters airways. H303 May be harmful if swallowed. H317 May cause an allergic skin reaction. H411 Toxic to aquatic life with long lasting effects. H410 Very toxic to aquatic life with long lasting effects. H400 Very toxic to aquatic life.
Other Information	None
Revision Date	April 11, 2016
Reason for revision	New SDS
Rev No/Repl, SDS Generated	01

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