



Safety Data Sheet

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

1.1 Product Identifier

Product Name	Lemongrass Oil				
Biological Definition	Cymbopogon Flexuosus Oil is the volatile oil obtained from the dried Lemon Grass, <i>Cymbopogon flexuosus</i> , <i>Poaceae</i> .				
INCI Name					
Synonyms & Trade Names	Lemon Grass Oil; Indian Verbena Oil; Indian Melissa Oil				
CAS-No	91844-92-7	EC No.	295-161-9	EINECS No.	295-161-9

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

No additional data available.

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.

Classification (EC 1272/2008)

Physical and Chemical Hazards:	Not classified.
Human health Asp:	Skin Irrit. 2 - H315; Eye Dam. 1 - H318; Skin Sens. 1 - H317
Environment:	Aquatic Chronic 2 - H411

2.2 Label Elements

Label in accordance with (EC) No 1272/2008



Signal Word

Danger

Contains

Citral, Geraniol

Hazard Statements

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements

- P272 Contaminated work clothing should not be allowed out of the workplace.
- P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P261 Avoid breathing vapour/spray.
 P264 Wash contaminated skin thoroughly after handling.
 P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplementary Precautionary Statements

P302+352 IF ON SKIN: Wash with plenty of soap and water.
 P310 Immediately call a POISON CENTER or doctor/physician.
 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.
 P391 Collect spillage.
 P321 Specific treatment (see medical advice on this label).
 P501 Dispose of contents/container to ...

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

70.0 – 78.0% CITRAL 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

4.0 – 6.0% Geraniol 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

1.0 – 2.5% Limonene 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

04. FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation	Remove victim immediately from source of exposure. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
Ingestion	Do not induce vomiting. Ingestion may cause nausea and vomiting. Immediately rinse mouth and provide fresh air. Get medical attention if symptoms persist.
Skin Contact	Remove contaminated clothing immediately and wash skin with soap and water. Get 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. Get medical attention immediately. Continue to rinse.

4.2 Most important symptoms and effects, both acute and delayed

No additional data available.

4.3 Indication of any immediate medical attention and special treatment needed

No additional data available.

05. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Extinguishing media: Carbon dioxide (CO₂). Dry chemical powder.

5.2 Special hazards arising from the product

When heated and in case of fire, irritating vapours/gases may be formed.

5.3 Advice for firefighters

Avoid inhalation of generated fumes or vapours. Use appropriate respiratory equipment. Do not allow spillage into drains or waterways. Water spray should be used to cool containers.

06. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. Handle the product using protective gloves resistant to the chemicals exposed. Avoid contact with skin and inhalation of its vapours or smoke. Maintain adequate ventilation in the working area after spilling.

6.2 Environmental Precautions

Do not discharge into drains, water courses or onto the ground.

6.3 Methods and material for containment and cleaning up.

Cover with an inert, inorganic, non-combustible absorbent material (e.g. dry-lime, sand, soda ash). Place in covered containers using non-sparking tools and transport outdoors. Avoid open flames or sources of ignition. Ventilate area and wash spill site after material pickup is complete. Dispose of in accordance with current laws and regulations.

6.4 Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet.

07. HANDLING AND STORAGE

7.1 Precautions for safe handling

Keep away from food and drink When using do not smoke. Avoid contact with skin and eyes. Handle in accordance with good hygiene and safety practice. Ensure adequate ventilation of the working area.

7.2 Conditions for safe storage, including any incompatibilities

Keep product in its original container well sealed, in a dry, ventilated area, away from potential sources of ignition and protected from light. Stock according to local / national regulations and always follow the precautions indicated on labels.

7.3 Specific end use(s)

No additional data available.

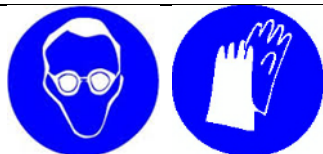
08. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Linalool (CAS: 78-70-6) Ingredient Comments: No exposure limits noted for ingredient(s).
EUGENOL (CAS: 97-53-0) Ingredient Comments: WEL = Workplace Exposure Limits

8.2 Exposure controls

Protective Equipment



Process Conditions

Provide eyewash station.

Engineering Measures	Provide adequate ventilation.
Respiratory Equipment	For high concentrations use respiratory equipment.
Hand Protection	Wear chemical resistant gloves (PVC) to avoid skin contact.
Eye Protection	Wear approved safety goggles.
Other Protection	Wear appropriate clothing to prevent any possibility of skin contact.
Hygiene Measures	Good personal hygiene practices are always advisable, especially when working with chemicals / oils.
Personal Protection	Use personal protection according to Directive 89/686/EEC.
Skin Protection	Wear apron or protective clothing to avoid skin contact.
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	Yellowish to yellow/orange
Odour	Sweet, lemon like
Relative Density	0.880 – 0.905 @ 20°C
Flash Point (°C)	71.0 - 85.0
Refractive Index	1.482 - 1.490 @ 20°C
Melting Point (°C)	No additional data available.
Boiling Point (°C)	No additional data available.
Vapour Pressure	0.05 mmHg.
Solubility in Water @20°C	1:10 v/v Ethanol 90%
Auto-ignition temperature (°C)	No additional data available.

9.2 Other information

No additional data available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

Stable under the recommended handling and storage conditions.

10.2 Chemical stability

Stable under the recommended handling and storage conditions.

10.3 Possible hazardous reactions

No additional data available.

10.4 Conditions to Avoid

Avoid heat, flames and other sources of ignition.

10.5 Incompatible materials

Avoid strong acids, alkalis and oxidising agents.

10.6 Hazardous Decomposition Products

In case of fire, dangerous decomposition products can be generated, such as carbon monoxide and dioxide and nitrogen fumes and oxides.

11. TOXOLOGICAL INFORMATION

11.1 Information on toxicological effects	
Acute Toxicity	Toxic Dose 1 - LD 50 4400 mg/kg (oral rat) Toxic Dose 2 - LD 50 >2000
Skin corrosion / irritation	May cause sensitisation by skin contact.
Serious eye damage / irritation	Spray and vapour in the eyes may cause irritation and smarting.
Respiratory or skin sensitisation	In high concentrations, vapours may irritate throat and respiratory system and cause coughing.
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	Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

12. ECOLOGICAL INFORMATION



12.1 Toxicity	
Dangerous for the environment: 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	
No additional data available.	
12.6 Other adverse effects	
Do not allow product to enter streams, sewers or other waterways.	

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods	
General information Do not re-use empty containers. Empty residue into a suitable disposal site. Dispose of in compliance with all local and national regulations.	

14. TRANSPORT INFORMATION

14.1 UN number	
UN No. Road	3082
UN No. SEA	3082
UN No. AIR	3082

14.2 UN proper shipping name
ENVIRONMENTALLY HAZARDOUS SUBSTANCE LIQUID N.O.S.
14.3 Transport hazard class(es)
ADR/RID/ADN Class: 9 Miscellaneous dangerous substances and articles. IMDG Class: 9 Miscellaneous dangerous substances and articles. ICAO Class/Division: 9 Miscellaneous dangerous substances and articles.
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-A-S-F Emergency Action Code 3Z Hazard No. (ADR) 90 Environmentally hazardous substance; miscellaneous dangerous substances. Tunnel Restriction Code (E)
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
<p>Statutory Instruments The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).</p> <p>Guidance Notes Workplace Exposure Limits EH40. CHIP for everyone HSG(108).</p> <p>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.</p>

15.2 Chemical safety assessment

No additional information available.

16. OTHER INFORMATION

Hazard and/or Precautionary Statements in Full	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H411 Toxic to aquatic life with long lasting effects.
Other Information	None
Revision Date	May 27, 2016
Reason for revision	New style updated SDS
Rev No/Repl, SDS Generated	02

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