



Safety Data Sheet

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

1.1 Product Identifier

Product Name	Palmarosa Oil.				
Biological Definition	Cymbopogon Martini Oil is the volatile oil expressed from the herb palmarosa, <i>Cymbopogon martini</i> , Gramineae.				
INCI Name	Cymbopogon Martini Oil				
Synonyms & Trade Names	-				
CAS-No	84649-81-0	EC No.	283-461-2	EINECS No.	283-461-2

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

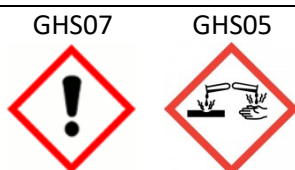
The full text for all hazard statements are displayed in section 16.

Classification (EC 1272/2008)

Skin Irrit 2 – H315
 Skin Sens. 1 – H317
 Eye Dam. 1 - H318
 Aquatic Chronic 3 – H412

2.2 Label Elements

Label in accordance with (EC) No 1272/2008



Signal Word Danger.

Contains Geraniol.

Hazard Statements

H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

<p>P310 Immediately call a POISON CENTER/doctor. P501 Dispose of contents in accordance with local, state or national legislation. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P362+P364 Take off contaminated clothing. And wash it before reuse. P302+P352 IF ON SKIN: Wash with plenty of water. P273 Avoid release to the environment</p>	
Supplementary Precautionary Statements	
<p>P264 Wash hands and exposed skin thoroughly after handling. P332+P313 If skin irritation occurs: Get medical advice/attention.</p>	
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	
< 83.0% Geraniol CAS No: 106-24-1 EC No : 203-377-1	
Classification (EC 1272/2008) Skin Irrit. 2 - H315, Skin Sens. 1 - H317, Eye Dam. 1 - H318	
< 10.0% Geranyl Acetate CAS No: 105-87-3 EC No: 203-341-5	
Classification (EC 1272/2008) Skin Irrit. 2 – H315, Skin Sens. 1- H317, Aquatic Chronic 3 – H412	
< 3.0% Linalool CAS No.: 78-70-6 EC No: 201-134-4	
Classification (EC 1272/2008) Skin Irrit. 2 - H315	
< 3.0% Beta Caryophyllene CAS No: 87-44-5 EC No: 201-746-1	
Classification (EC 1272/2008) Asp. Tox. 1 - H304	
< 0.5% Limonene CASNo: 5989-27-5 EC No: 227-813-5	
Classification (EC 1272/2008) Flam. Liq. 3 – H226, Skin Irrit 2 – H315, Asp Tox. 1 – H304, Skin Sens. 1 – H317 Aquatic Acute 1 – H400, Aquatic Chronic 1 – H410	

04. FIRST AID MEASURES

4.1 Description of first aid measures	
Inhalation	Seek emergency medical advice immediately. Following inhalation exposure move individual to fresh air.
Ingestion	Ask immediately medical assistance - mouth washing with water and do not provoke vomiting.
Skin Contact	Remove contaminated clothing and wash with water and soap the contaminated part – make sure you have eliminated the contamination - in case of complaints seek medical attention.
Eye Contact	Abundant eye-wash for 15 minutes with pure water, make sure you have eliminated the contamination, in case of complaints seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed
Symptoms: Inhalation: can cause slight headache, rhinorrhea, cough shortness of breath, chest pains, bronchial spasm Eye contact: can cause bloodshot eyes Skin contact: can cause slight skin rash. Ingestion: Nausea, vomiting and diarrhoea can result from ingestion.
4.3 Indication of any immediate medical attention and special treatment needed
Inhalation: Monitor for signs of respiratory distress. Eye contact: Monitor for irritation, pain or swelling. Skin contact: Monitor signs of skin sensitisation. Ingestion: Monitor signs of aspiration particularly following loss of consciousness.

05. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media
Suitable extinguishing media: SMALL FIRE: use CO ₂ , foam, dry powder - LARGE FIRE: use water spray or fog - cool containing vessels with water jet in order to prevent pressure build-up, auto-ignition or explosion. Unsuitable extinguishing media: pressurized water jet.
5.2 Special hazards arising from the product
Vapours may form explosive mixture with air - in case of fire, the following can be released: carbon monoxide (CO), carbon dioxide (CO ₂), smoke, soot.
5.3 Advice for firefighters
Standard procedure for chemical fires - spray extinguishing media to base of flames - use adequate protections for respiratory apparatus, avoid vapour inhalation.

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. If outside do not approach from downwind. If outside keep by standers upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak side up to prevent the escape of liquid.
6.2 Environmental Precautions
Do not discharge into drains, water courses or onto the ground. Contain spillages with sand, earth or any suitable adsorbent material.
6.3 Methods and material for containment and cleaning up.
Soak up spillage with sand or other inert absorbent material such as earth or vermiculite, transfer used material to a suitable waste container and dispose on accordance with regulations for the appropriate methods of waste treatment.
6.4 Reference to other sections
See section 7, 8 and 13.

07. HANDLING AND STORAGE

7.1 Precautions for safe handling
Safe handling: during handling keep original container closed - avoid contact with skin and eyes – wear adequate protective gloves and eye/face protection - avoid any sources of ignition – avoid exposing to high temperature during processing - maintain adequate local and general ventilation where product is handled. Hygiene at work: do not ingest or apply to the skin as such - no smoking - remove contaminated clothing – good personal washing routines should be followed - if at risk of contamination, foods, beverages and other

articles of consumption must not be stored or consumed at the work areas.

7.2 Conditions for safe storage, including any incompatibilities

Container: to be stored in stainless steel drums, preferably under inert atmosphere (nitrogen), protected from day-light **take note:** the container used during transportation must be considered only as a temporary container and it must not be considered in any case adequate for medium or long term warehousing.

Conditions: stored in a dry, aerated place, away from any heat source and ignition source.

Temperature: from 5°C and 30°C.

7.3 Specific end use(s)

Use as odour agent / flavouring agent - the information of this section are not related to the use of the product in combination with any other material or any other process altering its characteristics.

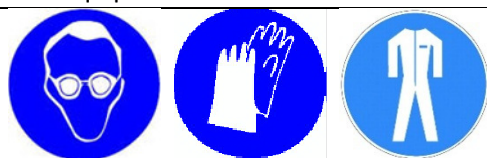
08. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

OEL (Oil Mist) 5mg/m³ 8hr TWA (EH40/2005).

8.2 Exposure controls

Protective Equipment



Process Conditions	Provide eyewash station.
Engineering Measures	Design work processes and engineering controls to minimise aerosol / mist formation, release of liquid and vapour. Where appropriate provide adequate ventilation suitably protected to minimise release to the environment to ensure a safe working atmosphere consistent with the OEL's in section 8.1 above.
Respiratory Equipment	Wear suitable respiratory protection to protect from vapours and oil mists.
Hand Protection	Suitable gloves tested to EN374 (should be checked regularly) - always use with clean, dry hands.
Eye Protection	Protective goggles with built-in-frame tested to EN166 (should be checked regularly).
Other Protection	Protective work clothing solvent resistant (should be checked regularly).
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 in case of splashes.
Environmental Exposure Controls	The usual precautions in handling chemicals have to be observed.

09. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Mobile liquid.
Colour	Light yellow to yellow brown.
Odour	Characteristic, grassy-floral.
Relative Density	Approx. 0.885 @ 20°C
Flash Point (°C)	64 - 100°C (94°C Typical)
Refractive Index	Approx. 1.475 @ 20°C
Melting Point (°C)	No additional data available.

Boiling Point (°C)	215°C (lit.)
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

10.1 Reactivity

Substance not reactive with water - substance not reactive if used according to storage & handling conditions & identified uses (see subsection 1.2). Oxidation will result in production of peroxides and will increase sensitisation potential.

10.2 Chemical stability

Substance stable if used according to storage & handling conditions & identified uses (see subsection 1.2). Susceptible to oxidation when exposed to atmospheric oxygen at all temperatures.

10.3 Possible hazardous reactions

Oxidation, reduction and hydrolytic reactions likely to increase skin / eye / respiratory irritation / sensitisation. May react vigorously with oxidising agents.

10.4 Conditions to Avoid

Conditions leading to thermal decomposition either by contact with strong oxidising or reducing substances or by combustion.

10.5 Incompatible materials

Highly oxidizing agents.

10.6 Hazardous Decomposition Products

Acrid smoke and irritating fumes released on combustion. In case of combustion: carbon monoxide (CO), carbon dioxide (CO₂).

11. TOXOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity	No additional data available.
Skin corrosion / irritation	Causes skin irritation.
Serious eye damage / irritation	Can cause serious eye damage.
Respiratory or skin sensitisation	May cause an allergic skin reaction.
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

Harmful to aquatic life with long lasting effects.

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
No additional data available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
The containers used for this product must completely empty before disposal. Dispose product and/or contaminated packaging in accordance with federal, state and local environmental control regulations - disposal through the waste water is illegal.

14. TRANSPORT INFORMATION

14.1 UN number	
UN No. Road	Not regulated.
UN No. SEA	Not regulated.
UN No. AIR	Not regulated.
14.2 UN proper shipping name	
None.	
14.3 Transport hazard class(es)	
None.	
14.4 Packing group	
None.	
14.5 Environmental hazards	
None.	
14.6 Special precautions for user	
Not applicable.	
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code	
None.	

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><u>Guidance Notes</u> Workplace Exposure Limits EH40. CHIP for everyone HSG(108).</p> <p><u>EU Legislation</u> 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</p>

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. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H304 May be fatal if swallowed and enters airways H400 Very toxic to aquatic life H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.
Other Information	None.
Revision Date	March 8, 2017
Reason for revision	Updated SDS.
Rev No/Repl, SDS Generated	03, replaces 02

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