



Safety Data Sheet

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

1.1 Product Identifier

Product Name	Bergamot Oil (Non FCF) Pure				
Biological Definition	"Bergamot Orange Oil". Citrus Bergamia Peel Oil Expressed is an essential oil expressed from the epicarps of the Bergamot, <i>Citrus bergamia risso</i> , <i>Rutaceae</i> .				
INCI Name	Citrus Bergamia Peel Oil Expressed				
Synonyms & Trade Names	-				
CAS-No	89957-91-5	EC No.	289-612-9	EINECS No.	289-612-9

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

Flavour and fragrance.

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)

Flam Liq 3 : H226 Flammable liquid and vapour.
Asp Tox 1 : H304 May be fatal if swallowed and enters airways.
Skin Irrit. 2 : H315 Causes skin irritation.
Skin Sens. 1 : H317 May cause an allergic skin reaction.
Aquatic Chronic 1 : H410 Very toxic to aquatic life with long lasting effects.

2.2 Label Elements

Label in accordance with (EC) No 1272/2008

GHS08



GHS07



GHS09



GHS02



Signal Word

Danger.

Contains

-

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	
<p>P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking. P241 Use explosion-proof electrical / ventilating / lighting equipment. P262 Do not get in eyes, on skin or on clothing P273 Avoid release to the environment. P280 Wear protective gloves/protective clothing/eye protection/face protection. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P331 Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P331 Do NOT induce vomiting. P405 Store locked up. P501 Dispose of contents/container according to the local regulations..</p>	
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	With the presence of various furocoumarins the product may have phototoxic effects (skin).

03. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures	
<39.0% Limonene CAS-No.: 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	
<29.0% Linalyl Acetate CAS: 115-95-7, EINECS: 204-116-4	
Classification (EC 1272/2008) Skin Irrit. 2 - H315; Eye Irrit. 2 - H319	
<11.0% Linalool 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	
<7.0% Beta-pinene CAS-No.: 127-91-3 EC No.: 204-872-5	
Classification (EC 1272/2008) Flam. Liq. 3 - H226, Asp. Tox. 1 - H304, Skin Irrit. 2 - H315, Skin Sens. 1 - H317	
<7.0% Y-terpinene CAS-No 99-85-4, EC 202-794-6	
Classification (EC 1272/2008); Flam. Liq. 3 – H226, Asp Tox. 1 –H304;	
<1.0% Myrcene (7-methyl-3-methylenoocta-1,6-diene) 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	
<1.0% Sabinene CAS-No.: 123-35-3 EC No.:204-622-5	
Classification (EC 1272/2008) Flam. Liq. 3 - H226	

<1.0% Alpha-pinene CAS-No.: 80-56-8 EC No.: 201-291-9

Classification (EC 1272/2008) Flam. Liq. 3 - H226, 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. Get medical attention if any discomfort continues.
Ingestion	Seek immediate medical assistance. Rinse mouth and drink abundant water to dilute substance. Do NOT induce vomiting.
Skin Contact	Remove contaminated clothes. Wash affected areas with copious amounts of water. Seek medical attention if required.
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

Symptoms : Inhalation: Can cause slight headache – Contact : can cause bloodshot eyes – can cause slight skin rash.

Acute and delayed effects : no post disorder effects are reported.

4.3 Indication of any immediate medical attention and special treatment needed

Immediate medical assistance : see point 4.1

Immediate / special treatment : see point 4.1

First aid specific means : eye wash fountain, safety shower should be available in the work area.

05. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Carbon dioxide, Dry powder or Foam. Cool containers with water.

Unsuitable extinguishing media : Pressurised 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, Carbon dioxide, smoke, soot.

5.3 Advice for firefighters

Spray extinguishing media to the base of flames. Use chemical protection clothing and self-contained breathing apparatus.

06. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non emergency personnel: in an emergency (i.e. unintentional important release of the product in enclosed space) respiratory protection (Gas filter A, Colour code brown: consider the maximum duration for wear) must be worn. Use insulating device for respiratory protection with an independent air supply in circumstances which are unclear - use adequate protections solvent resistant: security shoes, bodysuit, gloves and protective goggles (see point 8).

For emergency responders: as per non emergency personnel.

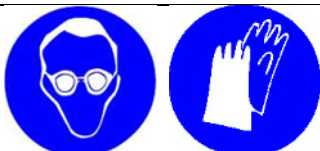
Emergency procedures: remove any ignition source and ensure adequate ventilation in working areas

following accidental releases.
6.2 Environmental Precautions
Keep away from sewerage, surface water and groundwater. Do not allow to enter sewerage system.
6.3 Methods and material for containment and cleaning up.
Keep away from heat and use non-combustible absorbing sawdust (sand, specific binder). Refer to point 13 for the appropriate methods of waste treatment.
6.4 Reference to other sections
See point 4, 8 & 13.

07. HANDLING AND STORAGE

7.1 Precautions for safe handling
<p>Safe handling: during handling keep original container closed - avoid contact with skin and eyes – wear adequate protective gloves protection 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.</p> <p>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.</p>
7.2 Conditions for safe storage, including any incompatibilities
<p>Container: to be stored in stainless steel drums, preferably under inert atmosphere (nitrogen) with minimum head space, 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.</p> <p>Conditions: stored in a dry, aerated place, away from any heat source and ignition source.</p> <p>Temperature: from 5 °C and 20 °C.</p>
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	
Not determined.	
8.2 Exposure controls	
Protective Equipment	
	
Process Conditions	Provide eyewash station.
Engineering Measures	Where appropriate, use closed system to transfer and process this material - if appropriate, isolate mixing rooms and other areas where this material is used or openly handled - maintain these areas under negative air pressure relative to the rest of the plant.
Respiratory Equipment	Not necessary in adequate local with general ventilation - avoid breathing vapours.
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	Measures should be taken to prevent materials from being splashed into the eyes or on the skin. Wear eyeshields and protective clothing.
Hygiene Measures	Good personal hygiene practices are always advisable, especially when working with chemicals / oils.
Personal Protection	Protective work clothing solvent resistant (should be checked regularly).
Skin Protection	Avoid contact with skin. Wear suitable gloves.
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	Clear mobile liquid.
Colour	Green.
Odour	Citrus, bergamot.
Relative Density	Approx. 0.876 @ 20°C
Flash Point (°C)	Approx. 58°C
Refractive Index	Approx. 1.465 @ 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

10.1 Reactivity

Substance not reactive with water - substance not reactive if used according to storage & handling conditions & identified uses (see subsection 1.2).

10.2 Chemical stability

Substance stable if used according to storage & handling conditions & identified uses (see subsection 1.2).

10.3 Possible hazardous reactions

None if used according to storage & handling conditions & identified uses (see subsection 1.2).

10.4 Conditions to Avoid

Avoid exposure to heat.

10.5 Incompatible materials

Strong oxidizers.

10.6 Hazardous Decomposition Products

No known hazardous decomposition products under recommended storage & handling conditions - in case of combustion: carbon monoxide (CO), carbon dioxide (CO₂).

11. TOXOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity	LD50 11.52 g/kg.
Skin corrosion / irritation	Hazard statement: H315 causes skin irritation.
Serious eye damage / irritation	Not irritating.
Respiratory or skin sensitisation	Hazard statement: H317 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	Hazard statement: H304 may be fatal if swallowed and enters airways.
Photo-toxicity	No additional data available.
Other Information	No additional data available.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic life: hazard statement: H410 very toxic to aquatic life with long lasting effects.
 Algae/aquatic plants: EC50 6.2 mg/l (48h) calculated value [source RIFM].
 Fish/aquatic invertebrates: N/D.
 PNECs: N/D.

12.2 Persistence & degradability

This substance to be considered as a readily biodegradable substance; based on its ready biodegradability, oil does not fulfil the criteria for persistence.

12.3 Bioaccumulation Potential

Hazard statement: H410 very toxic to aquatic life with long lasting effects.

12.4 Mobility in soil

This substance is considered as a readily biodegradable NCS. Based on the ready biodegradability of the NCS, simulation tests in surface water, sediment and soil are not required in accordance with column 2 of REACH Annex IX.

12.5 Results of PBT and vPvB Assessment

This substance is not classified as: PBT or vPvB / CMR.

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	1169
UN No. SEA	1169
UN No. AIR	1169

14.2 UN proper shipping name

Extracts, aromatic, liquid

14.3 Transport hazard class(es)
<p>ADR/RID/ADN – Class 3 ADR/RID/ADN – Class 3 IMDG – Class 3 ICAO – Class 3</p> <p>Transport Labels</p> 
14.4 Packing group
<p>ADR/RID/ADN Packing group – III IMDG Packing group – III ICAO Packing group – III</p>
14.5 Environmental hazards
<p>Environmentally Hazardous Substance/Marine Pollutant</p> 
14.6 Special precautions for user
<p>None</p>
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code
<p>-</p>

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
<p>No additional information available.</p>

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 H410 very toxic to aquatic life with long lasting effects
Other Information	None
Revision Date	March 10, 2017
Reason for revision	Updated SDS
Rev No/Repl, SDS Generated	02 replaces 01

DISCLAIMER: This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.