















## Safety Data Sheet

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

<b>1.1 Product Identifier</b>					
Product Name		Bergamot FCF Oil.			
Biological Definition		Citrus Aurantium Bergamia Peel Oil is the volatile oil obtained from the peel of <i>Citrus aurantium bergamia</i> , <i>Rutaceae</i> .			
INCI Name		Citrus Aurantium Bergamia Peel Oil.			
Synonyms & Trade Names		-			
CAS-No	89957-91-5	EC No.	289-612-9	EINECS No.	289-612-9
<b>1.2 Relative identified uses of the substance or mixture and uses advised against</b>					
Flavours, Fragrances: Use in accordance with good manufacturing and industrial hygiene practices.					
<b>1.3 Details of the supplier of the safety data sheet</b>					
Golden Bough Botanicals Inc 12-1585 Cliveden Ave Delta BC V3M 6M1					
<b>1.4 Emergency Tel. No.</b>		604-540-8700 (Monday-Friday 8:30 am-4:30 pm)			

### 02. HAZARDS IDENTIFICATION

<b>2.1 Classification of the substance or mixture</b>									
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. Eye Damage / Irritation Category 2. Sensitization - Skin Category 1. Aspiration Hazard Category 1. Hazardous to the Aquatic Environment - Acute Hazard Category 1. Hazardous to the Aquatic Environment - Long-term Hazard Category 1. 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. H319, Causes serious eye irritation.									
<b>2.2 Label Elements</b>									
Label in accordance with (EC) No 1272/2008									
<table style="width: 100%; text-align: center;"> <tr> <td>GHS02</td> <td>GHS07</td> <td>GHS08</td> <td>GHS09</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table>		GHS02	GHS07	GHS08	GHS09				
GHS02	GHS07	GHS08	GHS09						
									
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.  
 H319, Causes serious eye irritation.  
 H410, Very 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.  
 P305/351/338, IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P331, Do not induce vomiting.  
 P333/313, If skin irritation or rash occurs: Get medical advice/attention.  
 P337/313, If eye irritation persists: Get medical advice/attention.  
 P362, Take off contaminated clothing and wash before reuse.  
 P370/378, In case of fire: Use carbon dioxide, dry chemical, foam for extinction.  
 P391, Collect spillage.  
 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**

**38.39% Linalyl Acetate** CAS-No: 115-95-7; EC No.: 204-116-4

Classification (EC 1272/2008) Skin Irrit. 2 - H315, Eye Irrit. 2 - H319

**34.79% 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

<p><b>13.79% Linalool</b> CAS No: 78-70-6 ; EC No: 201-134-4</p> <p>Classification (EC 1272/2008) : Acute Tox. 5 - H303, Skin Irrit. 2 - H315, Aquatic Acute 3 - H402</p>
<p><b>7.58% <math>\beta</math>-Pinene</b> CAS No: 127-91-3 ; EC No: 20-872-5</p> <p>Classification (EC 1272/2008) : Flam. Liq. 3 - H226, Asp. Tox. 1 - H304, Skin Irrit. 2 - H315, Skin Sens. 1 - H317</p>
<p><b>7.56% <math>\gamma</math>-Terpinene (p-mentha-1,4-diene)</b> CAS No: 99-85-4 ; EC No: 202-794-6</p> <p>Classification (EC 1272/2008) Flam. Liq. 3 – H226, Asp Tox. 1 –H304;</p>
<p><b>1.89% <math>\alpha</math>-Pinene</b> CAS No: 80-56-8 ; EC No: 201-291-9</p> <p>Classification (EC 1272/2008) : Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Sens.1, H317; Aquatic Acute 1, Aquatic Chronic 1, H410</p>
<p><b>1.14% Myrcene</b> CAS No: 123-35-3 ; EC No: 204-622-5</p> <p>Classification (EC 1272/2008) Flam. Liq. 3 - H226, Asp. Tox. 1 - H304, Aquatic Chronic 3 - H412</p>
<p><b>1.09% Citral</b> CAS No: 5392-40-5 ; EC No: 226-394-6</p> <p>Classification (EC 1272/2008) Skin Irrit. 2 - H315, Eye Irrit. 2 - H319, Skin Sens. 1 - H317</p>
<p><b>0.56% Geranyl Acetate</b> CAS-No.: 105-87-3 EC No.: 203-341-5</p> <p>Classification (EC 1272/2008) Aquatic Chronic 2 - H411</p>
<p><b>0.41% Beta Caryophyllene</b> CAS-No.: 87-44-5 EC No.: 201-746-1</p> <p>Classification (EC 1272/2008) : Asp. Tox. 1 - H304</p>
<p><b>0.22% P-Mentha-1,3-Diene</b> CAS: 99-86-5, EC: 202-795-1</p> <p>Classification (EC 1272/2008) Asp. Tox. 1, H304, Acute Tox. 4, H302, Aquatic Chronic 2, H411, Flam. Liq. 3, H226</p>
<p><b>0.22% p-Cymene</b> CAS-No.: 99-87-6; EC No.: 202-796-7</p> <p>Classification (EC 1272/2008) Flam. Liq. 3 - H226, Asp. Tox. 1 - H304, Acute Tox. 5 - H303, Aquatic Chronic 2, H411, Skin Irrit. 3 -H316</p>
<p><b>0.17% d,l-Limonene (isomer unspecified)</b> CAS-No.: 7705-14-8; EC No.: 231-732-0</p> <p>Classification (EC 1272/2008) Flam. Liq. 3 - H226, Asp. Tox. 1 - H304, Skin Irrit. 2 - H315, Skin Sens. 1 - H317, Aquatic Chronic 1, H410</p>

## 04. FIRST AID MEASURES

### 4.1 Description of first aid measures

Inhalation	Remove from exposure area to fresh air. Obtain medical advice immediately.
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Ingestion	Immediately call a POISON CENTER or doctor/physician.
Skin Contact	Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<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.          Causes serious eye irritation.</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. Spray to base of flames.	
<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>	
Avoid inhalation. Avoid contact with skin and eyes. See protective measures under Section 7 and 8.	
<b>6.2 Environmental Precautions</b>	
Keep away from drains, surface and ground water, and soil.	
<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**

<b>8.1 Control parameters</b>	
No additional data available.	
<b>8.2 Exposure controls</b>	

Protective Equipment	
	
Process Conditions	Provide eyewash station.
Engineering Measures	Provide adequate ventilation Avoid static discharges in working area.
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	Avoid all skin contact. Wear chemical resistant gloves (PVC).
Eye Protection	Avoid contact with eyes. Wear approved safety goggles.
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, pale yellow.
Colour	Pale yellow.
Odour	Characteristic citrus bergamot.
Relative Density	0.847 – 0.870 @ 20°C
Flash Point (°C)	54
Refractive Index	1.471 to 1.482 @ 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

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

### 10.2 Chemical stability

Good stability under normal storage conditions.

<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: 13396.24 Assumed Toxicity Value (LD50 or ATE) for Acute Dermal Toxicity: 207373.27 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>	
Very 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.	
<b>12.6 Other adverse effects</b>	
No additional data available.	

## **13. DISPOSAL CONSIDERATIONS**

<b>13.1 Waste treatment methods</b>
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Do not release into the environment. Collect waste into suitable containers and contact hazardous chemical disposal company.

## 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. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects..
Other Information	Complies with REACH guidance for SDS as circulated by ECHA 2011.
Revision Date	May 27, 2016
Reason for revision	New SDS.
Rev No/Repl, SDS Generated	01

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