



## Safety Data Sheet

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

<b>1.1 Product Identifier</b>					
Product Name		Clove Bud Oil.			
Biological Definition		Eugenia Caryophyllus Bud Oil is an essential oil steam-distilled from the dried flower buds of the Clove, <i>Syzygium aromaticum</i> , syn. <i>Eugenia caryophyllus</i> , <i>Myrtaceae</i> . It contains eugenol (82-87% including about 10% acetyleugenol), caryophyllene			
INCI Name		Eugenia Caroyphyllus Bud Oil.			
Synonyms & Trade Names		-			
CAS-No	84961-50-2	EC No.	284-638-7	EINECS No.	284-638-7
<b>1.2 Relative identified uses of the substance or mixture and uses advised against</b>					
No additional data available.					
<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)	
Physical and Chemical:	This substance does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.
Human health:	Eye irritation, Category 2 (Eye Irrit. 2, H319). Skin sensitisation, Category 1 (Skin Sens. 1, H317).
Environment:	This substance does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.
<b>2.2 Label Elements</b>	
Label in accordance with (EC) No 1272/2008	
GHS07	
Signal Word	Warning.
Contains	EC 202-589-1 EUGENOL
Hazard Statements	
H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.	
Precautionary Statements	

<p>P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  P264 Wash ... thoroughly after handling.  P280 Wear protective gloves/protective clothing/eye protection/face protection.  P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.</p>	
Supplementary Precautionary Statements	
No additional data available.	
<b>2.3 Other Hazards</b>	
PBT or vPvB according to Annex XIII	The substance does not satisfy the PBT or vPvP criteria in accordance with annexe XIII of the REACH regulations EC 907/2006.
Adverse physio-chemical properties	No additional data available.
Adverse effects on human health	May be harmful if swallowed.

### 03. COMPOSITION/INFORMATION ON INGREDIENTS

<b>3.2 Mixtures</b>		
<b>&lt; 87.0% EUGENOL</b>	CAS-No: 97-53-0	EC No: 202-589-1
Classification (EC 1272/2008) GHS07, Warning, Aquatic Acute 2 (H401) Skin Sens. 1 (H317) Eye Irrit. 1 (H319), Skin Irrit. 3 (H316) Acute Tox. 5 (H303), Aquatic Acute 2 (H401) (EFFA), Skin Sens. 1 (H317) (EFFA) Eye Irrit. 1 (H319) (EFFA) Skin Irrit. 3 (316) (EFFA), Acute Tox. 5 (H303)(EFFA)		
<b>&lt; 5.0% Eugenyl Acetate</b>	CAS: 93-28-7	EC No: 202-235-6
Classification (EC 1272/2008) GHS07, Warning, Acute Tox. 4, H302		
<b>&lt; 0.1% Methyl Eugenol (Eugenyl Methyl Ether)</b>	CAS: 93-15-2	EC No: -202-223-0
Classification (EC 1272/2008) GHS07, GHS08, Warning, Acute Tox. 4, H302, Carc. 2, H351, Muta. 2, H341, [2] Carcinogenic, mutagenic or reprotoxic (CMR) substance.		

### 04. FIRST AID MEASURES

<b>4.1 Description of first aid measures</b>	
Inhalation	Move the exposed person to fresh air at once. Get medical attention if any discomfort continues. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.
Ingestion	Do not give the patient anything orally. In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor. Seek medical attention immediately, showing the label.
Skin Contact	Remove contaminated clothing. Wash skin with soap and plenty of water. Get medical attention if any discomfort continues. If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.
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 if irritation continues.
<b>4.2 Most important symptoms and effects, both acute and delayed</b>	
No additional data available.	
<b>4.3 Indication of any immediate medical attention and special treatment needed</b>	
No additional data available.	

## 05. FIRE-FIGHTING MEASURES

### 5.1 Extinguishing Media

Non-flammable.

### 5.2 Special hazards arising from the product

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health. Do not breathe in smoke.

In the event of a fire, the following may be formed: carbon monoxide (CO) and carbon dioxide (CO<sub>2</sub>)

### 5.3 Advice for firefighters

No additional data available.

## 06. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non fire-fighters: Avoid any contact with the skin and eyes.

For fire-fighters: Fire-fighters will be equipped with suitable personal protective equipment (See section 8).

### 6.2 Environmental Precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal. Do not discharge into drains, water courses or onto the ground.

### 6.3 Methods and material for containment and cleaning up.

Absorb with inert, non-combustible, inorganic absorbent material (e.g. sand, earth, diatomaceous earth, vermiculite). Sweep up and remove to an approved disposal container. Clean preferably with a detergent, do not use solvents.

### 6.4 Reference to other sections

No additional data available.

## 07. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Requirements relating to storage premises apply to all facilities where the substance is handled.

Individuals with a history of skin sensitisation should not, under any circumstance, handle this substance.

Always wash hands after handling. Remove and wash contaminated clothing before re-using. Prevent access by unauthorised personnel. No smoking, eating or drinking in areas where the substance is used. For personal protection, see section 8. Observe precautions stated on label and also industrial safety regulations. Avoid skin and eye contact with this substance.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Always keep in packaging made of an identical material to the original.

### 7.3 Specific end use(s)

No additional data available.

## 08. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

No additional data available.

### 8.2 Exposure controls

Protective Equipment	
	
Process Conditions	Provide eyewash station.
Engineering Measures	Ensure adequate ventilation, especially in confined areas.
Respiratory Equipment	Respiratory protection may be required, if ventilation is poor.
Hand Protection	Wear suitable protective gloves in the event of prolonged or repeated skin contact. Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374. Gloves must be selected according to the application and duration of use at the workstation. Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required. Recommended properties: Impervious gloves in accordance with standard EN374
Eye Protection	Avoid contact with eyes. Use eye protectors designed to protect against liquid splashes. Before handling, wear safety goggles with protective sides, in accordance with standard EN166. In the event of high danger, protect the face with a face shield. Prescription glasses are not considered as protection. Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours. Provide eyewash stations in facilities where the product is handled constantly.
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. Use personal protective equipment that is clean and has been properly maintained. Store personal protective equipment in a clean place, away from the work area.
Skin Protection	Avoid skin contact. Wear suitable protective clothing. Suitable type of protective clothing: In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact. In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact. Work clothing worn by personnel shall be laundered regularly. After contact with the product, all parts of the body that have been soiled must be washed.
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 liquid yellow to light brown.
Colour	Yellow to light brown.
Odour	Characteristic – spicy, eugenolic.
Relative Density	1.027 – 1.065 @ 20°C
Flash Point (°C)	PE > 100
Refractive Index	1.527 – 1.538 @ 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.

Auto-ignition temperature (°C)	No additional data available.
<b>9.2 Other information</b>	
No additional data available.	

## 10. STABILITY AND REACTIVITY

<b>10.1 Reactivity</b>	
Stable under normal temperature conditions and recommended use.	
<b>10.2 Chemical stability</b>	
Stable under normal temperature conditions and recommended use.	
<b>10.3 Possible hazardous reactions</b>	
No additional data available.	
<b>10.4 Conditions to Avoid</b>	
No additional data available.	
<b>10.5 Incompatible materials</b>	
No additional data available.	
<b>10.6 Hazardous Decomposition Products</b>	
The thermal decomposition may release/form: carbon monoxide (CO) and carbon dioxide (CO <sub>2</sub> )	

## 11. TOXOLOGICAL INFORMATION

<b>11.1 Information on toxicological effects</b>	
Acute Toxicity	EUGENYL METHYL ETHER (METHYL EUGENOL) (CAS: 93-15-2) Oral route : LD50 = 810 mg/kg EUGENYL ACETATE (CAS: 93-28-7) Oral route : LD50 = 1670 mg/kg HYDROCARBONS Oral route : LD50 = 800 mg/kg Dermal route : LD50 = 1300 mg/kg EUGENOL (CAS: 97-53-0) Oral route : LD50 = 2300 mg/kg
Skin corrosion / irritation	May cause an allergic reaction by skin contact.
Serious eye damage / irritation	May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days.
Respiratory or skin sensitisation	No additional data available.
Germ Cell Mutagenicity	No additional data available.
Carcinogenicity	Monograph(s) from the IARC (International Agency for Research on Cancer): CAS 97-53-0, IARC Group 3: The agent is not classifiable as to its carcinogenicity to humans.
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**

<b>12.1 Toxicity</b>
No additional data available.
<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>
Not applicable.
<b>12.6 Other adverse effects</b>
No additional data available.

## **13. DISPOSAL CONSIDERATIONS**

<b>13.1 Waste treatment methods</b>
Proper waste management of the substance and/or its container must be determined in accordance with Directive 2008/98/EC. Do not pour into drains or waterways. Waste: Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals. Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company. Do not contaminate the ground or water with waste, do not dispose of waste into the environment. Soiled packaging: Empty container completely. Keep label(s) on container. Give to a certified disposal contractor.

## **14. TRANSPORT INFORMATION**

<b>14.1 UN number</b>	
UN No. Road	Not regulated.
UN No. SEA	Not regulated.
UN No. AIR	Not regulated.
<b>14.2 UN proper shipping name</b>	
None.	
<b>14.3 Transport hazard class(es)</b>	
Not regulated.	
<b>14.4 Packing group</b>	
Not required.	
<b>14.5 Environmental hazards</b>	
None.	
<b>14.6 Special precautions for user</b>	
None.	
<b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code</b>	
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	H302 Harmful if swallowed. H312 Harmful in contact with skin. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H341 Suspected of causing genetic defects. H351 Suspected of causing cancer.
Other Information	None
Revision Date	February 13, 2017
Reason for revision	Updated SDS – composition.
Rev No/Repl, SDS Generated	03 replaces version 02.

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