SAFETY DATA SHEET (SDS)

Essential Oil: Clove Bud - Organic
SDS Created: 10 June 2015
Revision Date: October 25 2016

SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

1.1 Globally Harmonized System (GHS) product identifier
Product name: Clove Bud - Organic
Latin name of botanical source: Eugenia caryophyllata
INCI Name: Eugenia Caryophyllata (Clove Bud) Oil

1.2 Other means of identification
Item number/size: 238 – Various sizes not to exceed 33.81 Fluid Ounces or 1 Liter.

1.3 Recommended use of the chemical and restrictions on use:
Aromatherapy, natural perfumery, as recommended. Do not ingest.

1.4 Supplier’s details:
Company name: Eden Botanicals
Company address: 3820 Cypress Drive, Suite 12, Petaluma, CA 94954
Company contact: 707-509-0041 www.edenbotanicals.com

1.5 Emergency telephone number:
For Transport Emergencies Only: 1-855-645-6677 (available 9:00 am - 5:00 pm, Pacific Standard Time)
Poison Control Center: 1-800-222-1222 (available 24 hours)

SECTION 2: HAZARD(S) IDENTIFICATION

2.1 Classification of the substance or mixture
Skin irritation, Category 4

2.2 GHS label elements, including precautionary statements

<table>
<thead>
<tr>
<th>Signal Word</th>
<th>Hazardous Statement</th>
<th>Precautionary Statement</th>
<th>Hazard Pictograms</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>H305 - May be harmful if swallowed and enters airways</td>
<td>P101: If medical advice is needed, have product container or label at hand.</td>
<td>![Warning Symbol]</td>
</tr>
<tr>
<td></td>
<td>H315 - Causes skin irritation.</td>
<td>P102 - Keep out of the reach of children.</td>
<td>![Caution Symbol]</td>
</tr>
<tr>
<td></td>
<td>H320 - Causes eye irritation</td>
<td>P202 - Do not handle until all safety precautions have been read and understood.</td>
<td></td>
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<tr>
<td></td>
<td>H401 - Toxic to aquatic life</td>
<td>P273 - Avoid release to the environment.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>P280 - Wear protective gloves/protective clothing/eye protection/face protection.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>P362 - Take off contaminated clothing and wash before reuse.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</td>
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<tr>
<td></td>
<td></td>
<td>P301+310: IF SWALLOWED - Immediately call a POISON CENTER or doctor/physician.</td>
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<tr>
<td></td>
<td></td>
<td>P501 - Dispose of contents/container to in accordance with local/regional/national/international regulation.</td>
<td></td>
</tr>
</tbody>
</table>
2.3 Other hazards that do not result in classification
Mucous membrane irritant. Will cause skin irritation/allergy if used undiluted. Always dilute before use, patch test required.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Composition

<table>
<thead>
<tr>
<th>Chemical Name (common name)</th>
<th>CAS#</th>
<th>EC (EINECS)#</th>
<th>ICSC #</th>
<th>RTECS#</th>
<th>UN#</th>
<th>% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clove Bud Oil</td>
<td>8000-34-8</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>&lt; = 100 %</td>
</tr>
<tr>
<td>EU Allergens:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eugenol</td>
<td>97-53-0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>65.0 – 78.0 %</td>
</tr>
</tbody>
</table>

SECTION 4: FIRST-AID MEASURES

4.1 Description of necessary first-aid measures (of Substance)

Eye contact:
Check for and remove any contact lenses. Flush with water for 15 minutes. If symptoms persist get medical attention.

Skin Contact:
Mucous membrane irritant. Will cause skin irritation/allergy if used undiluted. If skin contact does occur, wash with water and soap and rinse thoroughly. If skin irritation continues, consult doctor.

Inhalation:
Not likely to occur under normal conditions of use. If symptoms occur, move to fresh air and obtain medical advice.

Ingestion:
Not an expected route of exposure. In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with milk or water and consult a doctor. Keep the exposed person at rest. Do NOT force vomiting unless directed to do so by medical personnel. Seek immediate medical attention and show the Substance’s label to medical personnel.

4.2 Most important symptoms and effects, both acute and delayed (of Substance)

Eye contact:
May cause eye irritation and corneal damage if not immediately rinsed out.

Skin Contact:
Repeated contact may cause allergic dermatitis.

Inhalation:
Breathing high concentrations of vapor may cause anesthetic effects.

Ingestion:
Not an expected route of exposure.

4.3 Indication of any immediate medical attention and special treatment needed (of Substance)
None known.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Flash point
87.78°C

5.2 Extinguishing media
Suitable extinguishing media: sprayed water or water mist, alcohol-resistant foam, multipurpose ABC powder, BC powder, carbon dioxide (CO2)

Unsuitable extinguishing media: water jet (straight stream).

5.3 Specific hazards arising from the chemical
None known.

5.4 Special protective actions for firefighters
Use self-contained breathing apparatus and protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Stop leak if you can do so without risk. Consult safety measures listed under Sections 7 and 8.

**For fire-fighters:**
Fire-fighters will be equipped with suitable personal protective equipment (See Section 8). High temperature may increase the pressure inside the container—cool the container by sprinkling water. Avoid breathing emitted vapors.

### 6.2 Environmental precautions
Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, or diatomaceous earth in drums for waste disposal. Avoid allowing product to reach sewage system or any waterways. Inform respective authorities in case of seepage into sewage system or waterways.

**6.3 Methods and material for containment and cleaning up**
Absorb spill with non-combustible matter (such as detergent--do not use solvents) and transfer to containers.

### SECTION 7: HANDLING AND STORAGE

#### 7.1 Precautions for safe handling
Handle in accordance with good industrial hygiene and safety practice. Avoid unintentional contact with skin surfaces. Wear suitable protective clothing. Avoid inhalation. Ensure good ventilation or exhaust in workplace. Do not allow contact with eyes. Always wash hands after handling. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

#### 7.2 Conditions for safe storage, including any incompatibilities
Store in closed glass containers, away from heat, light and other sources of ignition. Store in cool area.

### SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION

#### 8.1 Control parameters
- OSHA TWA: None established
- OSHA STEL: None established
- ACGIH TWA: None established
- ACGIH STEL: None established
- NOHSC TWA: None established
- NOHSC STEL: None established

**8.2 Appropriate engineering controls**
General room or local exhaust ventilation is usually required to meet exposure limit(s). Electrical equipment should be grounded and conform to applicable electrical code.

**8.3 Individual protection measures**
**Personal protective equipment:**
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. Never eat, drink, or smoke during use. Remove and wash contaminated clothing before re-using.

**Eye/face protection:**
Avoid contact with eyes. Use eye protectors (safety goggles in accordance with standard EN166) designed to protect against liquid splashes.

**Hand protection:**
Wear suitable protective gloves (resistant to chemical agents in accordance with standard EN374) in the event of prolonged or repeated skin contact.
Type of gloves recommended: Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR)) or PVA (Polyvinyl alcohol).

**Body protection:** 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.

#### 8.4 First aid
- In case of contact with skin:
  - Wash immediately with plenty of water and mild soap.
  - For eye or nasal contact:
  - Wash with plenty of water.
  - Seek medical attention.
- In case of inhalation:
  - Remove to fresh air.
  - For breathing difficulty:
  - Call for medical attention.

### SECTION 9: PHYSICAL CHEMICAL PROPERTIES

**Physical state:** Volatile liquid
**Color:** Pale yellow to yellow
**Odor:** Spicy, warm, sweet

**Miscibility in water:** Insoluble

**Miscibility in alcohol:** Insoluble in Ethanol

**Miscibility in essential oil:** Not specified

**Liposolubility:** Not specified

**pH:** Not applicable

**Boiling point/boiling range:** 251°C

**Flash Point:** 87.78°C

**Vapor pressure:** 3.01 Pa

**Density:** Not specified

**Water solubility:** Insoluble

**Self-ignition temperature:** Not specified

**Miscibility in essential oil:** Not specified

**Miscibility in water:** Insoluble

**Miscibility in alcohol:** Insoluble in Ethanol

**Miscibility in essential oil:** Not specified

**Liposolubility:** Not specified

**pH:** Not applicable

**Boiling point/boiling range:** 251°C

**Flash Point:** 87.78°C

**Vapor pressure:** 3.01 Pa

**Density:** Not specified

**Water solubility:** Insoluble

**Self-ignition temperature:** Not specified

**Decomposition point/decomposition range:** Not specified

**Refractive index @ 20°C:** 1.5257 – 1.5380 (@ 25 °C)

**Partition coefficient:** Not specified

**Specific gravity @ 20 °C:** 1.0323 – 1.0750

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**SECTION 10: STABILITY AND REACTIVITY**

10.1 Reactivity
Not reactive.

10.2 Chemical stability
This substance is stable under the recommended handling and storage conditions in Section 7.

10.3 Possibility of hazardous reactions
When exposed to high temperatures, the substance may release hazardous decomposition products, such as carbon monoxide, carbon dioxide, fumes, and nitrogen oxide.

10.4. Conditions to avoid
None known.

10.5 Incompatible materials
Alkali metals, ammonia, oxidizing agents, peroxides strong inorganic acids.

10.6 Hazardous decomposition products
The thermal decomposition may release/form carbon monoxide (CO) and carbon dioxide (CO2).

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**SECTION 11: TOXICOLOGICAL INFORMATION**

11.1 Substance

**Acute toxicity:**
LD50 oral > 2650 mg/kg (rat)  
LD50 dermal > 5000 mg/kg (rabbit)

**Skin corrosion/irritation:**
May be irritating to skin.

**Serious eye damage/irritation:**
May be irritating to eyes. Prompt rinsing and removal of the substance will avoid damage.

**Respiratory sensitization:**
Breathing high concentrations of vapor may cause anesthetic effects.

**Germ cell mutagenicity:**
Not specified

**Carcinogenicity:**
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as
probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity:**
Not specified

**STOT-single exposure:**
Not specified

**STOT-related exposure:**
Not specified

**Aspiration hazard:**
Not specified

### 11.2 Information on the likely routes of exposure
Skin/scalp contact.

### 11.3 Symptoms related to the physical, chemical, and toxicological characteristics
None known. Irritation of the eye if exposed. Redness of the skin if irritated.

### 11.4 Delayed and immediate effects and also chronic effects from short-term and long-term exposure
Exposure to vapors from this solvent in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver, and central nervous system. Repeated or prolonged contact with the substance may cause removal of natural oil from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. Splashes in the eyes may cause irritation and reversible damage.

### 11.6 Interactive effects
Not specified

### 11.7 Where specific chemical data are not available
Not specified

### 11.8 Substances
Not specified

### 11.9 Substances verses ingredient information
Not specified

### 11.10 Other Information
None

### SECTION 12: ECOLOGICAL INFORMATION

#### 12.1 Info summery of Ecological information
Balance of data on substance as a whole, not determined.

#### 12.2 Eco toxicological properties of specific substances
See each category below for specific substances

##### 12.3 Toxicity
**Acute fish toxicity:**
LC50 / 96 HOUR – No data available
Toxicity to aquatic plants – No data available
Toxicity to microorganisms – No data available
Toxicity threshold – No data available

##### 12.4 Persistence and degradability
Biodegradation is expected

##### 12.5 Bio-accumulative potential
Bioaccumulation is unlikely

##### 12.6 Mobility in soil
Unknown

##### 12.7 Other adverse affect
Avoid exposure to marine environments and waterways

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods**
Do not pour into drains or waterways. Observe all federal, state, and local environmental regulations. Member State-specific and Community-specific provisions must be considered. Considering the relevant known environmental and human health hazards of the materials, review and implement appropriate technical and procedural wastewater and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimization be practiced. The best available technology should be utilized to prevent environmental release. This may include destructive techniques for waste and wastewater. In extreme situations, contact a licensed professional waste disposal service to dispose of this material.

**Waste:**
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 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.

**Soiled packaging:**
Empty all containers completely. Keep label(s) on every container. Give to a certified disposal contractor.

**SECTION 14: TRANSPORT INFORMATION**

**14.1 UN Number**
N/A

**14.2 UN Proper shipping name**
N/A

**14.3 Transportation hazard classes**
N/A

**14.4 Packing group, if applicable**
N/A

**14.5 Environmental hazards**

⚠️ Toxic to aquatic life.

**14.6 Special precautions for user**

⚠️ May cause mild health effect.

⚠️ Harmful in contact with skin and eye.

**14.7 Transport in bulk according to Annex II of MARPOL 73/78° and IBC Code**
Not specified

**14.8 Additional transport information**
Not specified
**SECTION 15: REGULATORY INFORMATION**

15.1 Safety, health, and environmental regulations/legislation specific for the substance

<table>
<thead>
<tr>
<th>Country</th>
<th>Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>Not regulated</td>
</tr>
<tr>
<td>EU</td>
<td>See EU Allergens in Section 3</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>Not regulated</td>
</tr>
<tr>
<td>Singapore</td>
<td>Not regulated</td>
</tr>
<tr>
<td>USA</td>
<td>Not regulated by Federal or State Regulations</td>
</tr>
<tr>
<td></td>
<td><strong>California Prop. 65 Components</strong></td>
</tr>
<tr>
<td></td>
<td>This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.</td>
</tr>
</tbody>
</table>

**SECTION 16: OTHER INFORMATION**

Disclaimer:
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<table>
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<tr>
<th>Revision</th>
<th>Date</th>
<th>Prepared By</th>
<th>Reviewed By</th>
</tr>
</thead>
<tbody>
<tr>
<td>R.1</td>
<td>10 June 2015</td>
<td>H. Merrill</td>
<td>K. Goelz</td>
</tr>
<tr>
<td>R.2</td>
<td>17 August 2015</td>
<td>H. Merrill</td>
<td>C. Berryhill</td>
</tr>
<tr>
<td>R.3</td>
<td>October 24 2016</td>
<td>MEBB</td>
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