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## *Safety Data Sheet*

# **Organic Clove Bud Essential Oil**

### *(Eugenia caryophyllus)*

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Issue date: 26/02/2025  
Version: 1 (26/02/2025)

In accordance with REACH Regulation EC No.1907/2006

### **Section 1. Identification of the substance or the mixture and of the supplier**

#### **1.1 Product Identifier**

**Product identifier:** Clove Bud, Essential Oil Organic; CAS: 84961-50-2

**Other identifiers:** Eugenia caryophyllus Bud Oil

#### **1.2 Relevant identified uses of the substance of mixture and uses advised against**

**Product uses:** Flavours, Fragrances

#### **1.3 Details of the supplier of the safety data sheet**

**Company name:** NHR Organic Oils Ltd.

**Company address:** 24 Chatham Place Brighton  
BN1 3TN

**Contact:** Regulatory Dept.

**E-Mail address:** [info@nhrorganicoils.com](mailto:info@nhrorganicoils.com)

**Company phone:** +44 (0)1273 746505

#### **1.4 Emergency telephone number**

**Emergency phone:** +44 (0)123 746505

### **Section 2. Hazards identification**

#### **2.1 Classification of the substance or mixture**

##### **Classification under Regulation (EC) No 1272/2008**

**Class and category of danger:** Acute Toxicity - Oral Category 4  
Acute Toxicity - Dermal Category 4  
Skin Corrosion / Irritation Category 2  
Eye Damage / Irritation Category 2  
Sensitization - Skin Category 1  
Aspiration Hazard Category 1  
H302, Harmful if swallowed.  
H304, May be fatal if swallowed and enters airways.  
H312, Harmful in contact with skin.  
H315, Causes skin irritation  
H317, May cause an allergic skin reaction.  
H319, Causes serious eye irritation.

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## 2.2 Label elements

### Classification under Regulation (EC) No 1272/2008

**Signal word:** Danger

**Hazard statements:** H302, Harmful if swallowed.  
H304, May be fatal if swallowed and enters airways.  
H312, Harmful in contact with skin.  
H315, Causes skin irritation.  
H317, May cause an allergic skin reaction.  
H319, Causes serious eye irritation.

**M factor:** None

**Supplemental Information:** None

**Precautionary statements:** P261, Avoid breathing vapour or dust.  
P264, Wash hands and other contacted skin thoroughly after handling.  
P270, Do not eat, drink or smoke when using this product.  
P272, Contaminated work clothing should not be allowed out of the workplace.  
P280, Wear protective gloves/eye protection/face protection.  
P301/310, IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P302/352, IF ON SKIN: Wash with plenty of soap and water.  
P305/351/338, IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P312, Call a POISON CENTRE or doctor/physician if you feel unwell.  
P330, Rinse mouth.  
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.  
P405, Store locked up.  
P501, Dispose of contents/container to approved disposal site, in accordance with local regulations.

**Pictograms:**



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## 2.3 Other hazards

**Other hazards:** Hydrocarbon Concentration %: 10.0000%  
Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 17 1207/2006, Annex XIII.  
Substance does not meet the criteria for Endocrine Disruptor according to Regulation (EU) 2017/2100 3 or Regulation (EU) 2018/605 4.

## Section 3. Composition / information on ingredients

### 3.1 Substances

**Product identifier:** Clove Bud, Essential Oil Organic; CAS: 84961-50-2

**Contains:**

Name	CAS	EC	REACH Registration No.	%	Classification for (CLP) 1272/2008	Specific Conc. Limits, M-factors and ATEs
Eugenol	97-53-0	202-589-1		50-100%	Eye Irrit. 2-Skin Sens. 1B;H317-H319,-	oral: ATE = 2500 mg/kg bw
Eugenyl acetate	93-28-7	202-235-6		10-<20%	Acute Tox. 4;H302,-	oral: ATE = 1670 mg/kg bw
beta-Caryophyllene	87-44-5	201-746-1		10-<20%	Skin Sens. 1B-Asp. Tox 1;H304-H317,-	
alpha-Humulene	6753-98-6	229-816-7		5-<10%	Skin Irrit. 2-Eye Irrit. 2-STOT SE 3;H315-H319-H335,-	
Eugenyl methyl ether	93-15-2	202-223-0		0.1-<1%	Acute Tox. 4-Muta. 2-Carc. 2;H302-H341-H351,-	oral: ATE = 1180 mg/kg bw

## Section 4. First-aid measures

### 4.1 Description of first aid measures

**Inhalation:** Remove from exposure site to fresh air, keep at rest, and obtain medical attention.  
**Eye exposure:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
**Skin exposure:** IF ON SKIN: Wash with plenty of soap and water.  
**Ingestion:** IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

### 4.2 Most important symptoms and effects, both acute and delayed

Harmful if swallowed.  
May be fatal if swallowed and enters airways.  
Harmful in contact with skin.  
Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye irritation.

### 4.3 Indication of any immediate medical attention and special treatment needed

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None expected, see Section 4.1 for further information.

## **Section 5: Firefighting measures**

### **5.1 Extinguishing media**

Suitable media: Carbon dioxide, Dry chemical, Foam.

### **5.2 Special hazards arising from the substance or mixture**

In case of fire, may be liberated: Carbon monoxide, Unidentified organic compounds.

### **5.3 Advice for fire fighters:**

In case of insufficient ventilation, wear suitable respiratory equipment.

## **Section 6. Accidental release measures**

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

Avoid inhalation. Avoid contact with skin and eyes. See protective measures under Section 7 and 8.

### **6.2 Environmental precautions:**

Keep away from drains, surface and ground water, and soil.

### **6.3 Methods and material for containment and cleaning up:**

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.

### **6.4 Reference to other sections:**

Also refer to sections 8 and 13.

## **Section 7. Handling and storage**

### **7.1 Precautions for safe handling:**

Do not eat, drink or smoke when using this product.

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

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

### **7.3 Specific end use(s):**

Flavours, Fragrances: Use in accordance with good manufacturing and industrial hygiene practices.

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## Section 8. Exposure controls/personal protection

### 8.1 Control parameters

Workplace exposure limits: Not Applicable

### 8.2 Exposure Controls

#### Eye / Skin Protection

Wear protective gloves/eye protection/face protection

#### Respiratory Protection

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.

## Section 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Physical State/Colour:</b>	Liquid, yellow to light brown
<b>Odour:</b>	Characteristic
<b>Odour threshold:</b>	Not determined
<b>Melting point / freezing point:</b>	Not determined
<b>Boiling point or initial boiling point and boiling range:</b>	Not determined
<b>Flammability:</b>	Not determined
<b>Lower and upper explosion limit:</b>	Not determined
<b>Flash point:</b>	124 °C
<b>Auto-ignition temperature:</b>	Not determined
<b>Decomposition temperature:</b>	Not relevant
<b>pH:</b>	Not determined
<b>Kinematic viscosity:</b>	Not determined
<b>Solubility:</b>	Not determined
<b>Partition coefficient: n-octanol/water (log value):</b>	Not determined
<b>Vapour pressure:</b>	Not determined
<b>Density and/or relative density:</b>	1.0270 - 1.0650
<b>Relative vapour density:</b>	Not determined
<b>Particle characteristics:</b>	Not determined

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**9.2 Other information:** None available

## Section 10. Stability and reactivity

### **10.1 Reactivity:**

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

### **10.2 Chemical stability:**

Good stability under normal storage conditions.

### **10.3 Possibility of hazardous reactions:**

Not expected under normal conditions of use.

### **10.4 Conditions to avoid:**

Avoid extreme heat.

### **10.5 Incompatible materials:**

Avoid contact with strong acids, alkalis or oxidising agents.

### **10.6 Hazardous decomposition products:**

Not expected.

## Section 11. Toxicological information

### **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

<b>Acute Toxicity:</b>	Acute Toxicity - Oral Category 4 Acute Toxicity - Dermal Category 4
Acute Toxicity Oral	>5000
Acute Toxicity Dermal	Not Applicable
Acute Toxicity Inhalation	Not Available
<b>Skin corrosion/irritation:</b>	Skin Corrosion / Irritation Category 2
<b>Serious eye damage/irritation:</b>	Eye Damage / Irritation Category 2
<b>Respiratory or skin sensitisation:</b>	Sensitization - Skin Category 1
<b>Germ cell mutagenicity:</b>	Based on available data the classification criteria are not met.
<b>Carcinogenicity:</b>	Based on available data the classification criteria are not met.
<b>Reproductive toxicity:</b>	Based on available data the classification criteria are not met.
<b>STOT-single exposure:</b>	Based on available data the classification criteria are not met.
<b>STOT-repeated exposure:</b>	Based on available data the classification criteria are not met.
<b>Aspiration hazard:</b>	Aspiration Hazard Category 1

### **Information about hazardous ingredients in the mixture**

Ingredient	CAS	EC	LD50/ATE Oral (mg/kg)	LD50/ATE Dermal (mg/kg)	LC50/ATE Inhalation	LC50 Route
Eugenyl acetate	93-28-7	202-235-6	1670	Not available	Not available	Not available

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Refer to Sections 2 and 3 for additional information.

## 11.2 Information on other hazards

Not Applicable

## Section 12. Ecological information

**12.1 Toxicity:** Not available

**12.2 Persistence and degradability:** Not available

**12.3 Bioaccumulative potential:** Not available

**12.4 Mobility in soil:** Not available

### 12.5 Results of PBT and vPvB assessment:

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

**12.6 Endocrine disrupting properties:** Not Applicable

**12.7 Other adverse effects:** Not available

## Section 13. Disposal considerations

### 13.1 Waste treatment methods:

Dispose of in accordance with local regulations. Avoid disposing into drainage systems and into the environment. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## Section 14. Transport information

	14.1 UN number or ID number:	14.2 UN Proper Shipping Name:	14.3 Transport hazard class (es):	Sub Risk:	14.4 Packing Group:
UN Model Regulations	Not classified	-	-	-	-
IMDG	Not classified	-	-	-	-
ADR,RID,ADN	Not classified	-	-	-	-
ICAO TI	Not classified	-	-	-	-

**14.5 Environmental hazards:** Not environmentally hazardous for transport

**14.6 Special precautions for user:** None additional

### 14.7 Maritime transport in bulk according to IMO instruments:

Not classified

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## Section 15. Regulatory information

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

None additional

### 15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

## Section 16. Other information

**Concentration % Limits:** EDI 2=11.76% SS 1=1.18% AH 1=100.00%

**Total Fractional Values:** EDI 2=8.50 SS 1=85.00 AH 1=1.00

### Key to revisions:

Not applicable

### Key to abbreviations:

Abbreviation	Meaning
Acute Tox. 4	Acute Toxicity - Oral Category 4
Asp. Tox 1	Aspiration Hazard Category 1
Carc. 2	Carcinogenicity Category 2
Eye Irrit. 2	Eye Damage / Irritation Category 2
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.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects (exposure route).
H351	Suspected of causing cancer (exposure route).
Muta. 2	Germ Cell Mutagenicity Category 2
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing vapour or dust.
P264	Wash hands and other contacted skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/eye protection/face protection.
P281	Use personal protective equipment as required.
P301/310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301/312	IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell.
P302/352	IF ON SKIN: Wash with plenty of soap and water.
P304/340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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P305/351/338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308/313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTRE or doctor/physician if you feel unwell.
P330	Rinse mouth.
P331	Do not induce vomiting.
P332/313	If skin irritation occurs: Get medical advice/attention.
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.
P363	Wash contaminated clothing before reuse.
P403/233/235	Store in a well-ventilated place. Keep container tightly closed. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to approved disposal site, in accordance with local regulations.
STOT SE 3	Specific Target Organ Toxicity (Single Exposure) Category 3
Skin Irrit. 2	Skin Corrosion / Irritation Category 2
Skin Sens. 1B	Sensitization - Skin Category 1B

The information in this safety data sheet is to the best of our knowledge true and accurate but all data, instructions, recommendations and/or suggestions are made without guarantee.