

MATERIAL SAFETY DATA SHEET

Product: Clove Bud Essential Oil
Version: 1

Section 1: Identification of the substance/mixture and of the supplier

1.1 Product Identifier

Product Name	Clove Bud Essential Oil				
Biological Definition	The volatile oil obtained by the steam distillation of the unopened flower buds of <i>Syzygium aromaticum</i> (L.) Merr & Perry (<i>Eugenia caryophyllus</i> (Spreng.) Bullock & Harrison).				
INCI Name	Eugenia Caryophyllus bud oil				
Synonyms & Trade Names	- - -				
FEMA No	2323	FDA No	§184.1257	CoE No	188
CAS No	8000-34-8	EC No	284-638-7	Einecs No	284-638-7

1.2 Details of the supplier of the safety data sheet

1.3 Emergency telephone number

Company Identification	Fresholi Helen Williams 494 Groby Road Leicester LE3 9QD +44 (0) 116 299 6006 email: helen@fresholi.co.uk	Emergency Contact: Helen Williams Tel +44 (0) 116 299 6006
------------------------	-----------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------


Section 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (67/548/EEC)	Xn; R36-43-65, S24-37-62
Classification (EU 1272/2008)	UN-GHS: ATO 5(2650); ATD 5(4900); AH 1; SCI 3; EDI 2A; SS 1; EH A2 EU-CLP: AH 1, SS 1, EDI 2

2.2 Label elements

Label in accordance with Regulation (EC) No 1272/2008

GHS Label:	 GHS07
Signal word:	Danger
Contains	Eugenol, eugenyl acetate
Hazard Statements:	H304 May be fatal if swallowed and enters airways H317 May cause an allergic skin reaction H319 Causes serious eye irritation
Precautionary Statements:	P301/310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P331 Do NOT induce vomiting P262 Do not get in eyes, on skin or on clothing P280 Wear protective gloves/protective clothing/eye protection/face protection. P305/351/338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplementary Precautionary Statements:	- - - - -

Risk phrases and Safety phrases in full refer to *Section 16 – Other Information*

MATERIAL SAFETY DATA SHEET

Product: Clove Bud Essential Oil
Version: 1**2.3 Other hazards**

Adverse physio-chemical properties	Combustible but will not self-ignite
Adverse effects on human health	May cause sensitisation/irritation by skin contact

SECTION 3: Composition/information on ingredients**3.1 Substances**

73% Eugenol UN-GHS: ATO 5(2300); SCI 3; EDI 2A; SS 1; EH A2
16% beta-Caryophyllene UN-GHS: SCI 3
8% Eugenyl acetate UN-GHS: ATO 4(1670); SCI 3

3.2 Mixtures

EU INCI	US INCI
N/A	N/A

SECTION 4: First-aid measures**4.1 Description of first aid measures**

General Information	See categories below
Inhalation	Remove from exposure area to fresh air. Contact a doctor if necessary.
Ingestion	Wash mouth out with water and obtain medical advice immediately.
Skin Contact	Remove contaminated clothing. Wash thoroughly with soap and water. Seek medical advice if irritation persists or there is any sign of tissue damage.
Eye Contact	Flush with plenty of water and seek medical advice if necessary.

4.2 Most important symptoms and effects, both acute and delayed

N/A

4.3 Indication of any immediate medical attention and special treatment needed

N/A

SECTION 5: Firefighting measures**5.1 Extinguishing media**

Use CO₂, Dry Powder or Foam type extinguishers, spraying extinguishing media to base of flames. Do not use direct water jet on burning material.

5.2 Special hazards arising from the substance or mixture

None

5.3 Advice for fire fighters:

Wear protective clothing. Avoid inhalation of vapours. Closed containers may build up pressure when exposed to heat and should be cooled with water spray.

MATERIAL SAFETY DATA SHEET

Product: Clove Bud Essential Oil
Version: 1

SECTION 6: Accidental release measures

6.1 Personal precautions:

Maintain good occupational and personal hygiene. Avoid contact with skin and eyes.

6.2 Environmental precautions:

Do not discharge directly into drains or soil. Keep away from surface and ground water.

6.3 Methods and material for containment and cleaning up:

Soak up spillage with sand or other inert material. Transfer soaked material to suitable waste container and dispose according to prevailing regulations.

6.4 Reference to other sections:

Please refer to Section 8 - Exposure controls/personal protection for further information on personal precautions.
Please refer to Section 13 - Disposal Considerations for further information on waste treatment.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:

Apply good manufacturing practice and industrial hygiene practices, ensuring proper workplace ventilation. Observe good personal hygiene, and do not eat, drink or smoke whilst handling.

7.2 Conditions for safe storage, including any incompatibilities:

Store in tightly closed original container, in a cool, dry and ventilated area away from heat sources and protected from light. Keep air contact to a minimum.

7.3 Specific end use(s):

N/A

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

None

8.2 Exposure Controls

Eye Protection		Use Safety Glasses.
Hand protection		Avoid all skin contact. Use chemically resistant gloves if required.
Respiratory Equipment	As required. Avoid breathing product vapour.	
Hygiene Measures		Wash hands with soap and water after handling
Engineering Measures	Ensure good ventilation of working area.	

MATERIAL SAFETY DATA SHEET

Product: Clove Bud Essential Oil
Version: 1

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Mobile liquid, sometimes slightly viscous
Colour	Yellow to light brown
Odour	Spicy, eugenolic
Relative Density	1.042 to 1.065 @ 20 C
Flash point:	120 C c/c
Refractive Index	1.528 to 1.538 @ 20 C

Melting Point	Not given
Boiling Point	Not given
Vapour Pressure	Not given
Solubility in water @ 20° C	Insoluble
Auto-ignition Temperature	Not determined

9.2 Other information:

N/A

SECTION 10: Stability and reactivity

10.1 Reactivity:

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

10.2 Chemical stability:

Stable under normal temperature conditions.

10.3 Possibility of hazardous reactions:

None

10.4 Conditions to avoid:

Avoid storage temperatures above 25°C.

10.5 Incompatible materials:

Avoid contact with strong acids, alkalis and oxidising agents.

10.6 Hazardous decomposition products:

Liable to cause smoke and acrid fumes during combustion: carbon monoxide, carbon dioxide and other non-identified organic compounds may be formed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity:	Dermal LD50 skn-rbt > 5g/kg (Moreno 1973) Acute oral LD50 orl-rat: 2.65g/kg (Moreno 1973)
Skin corrosion / irritation:	Not hazard-listed under EC 1272/2008 guidelines
Serious eye damage/irritation:	Serious eye damage/irritation Hazard Category 2 according to EC 1272/2008
Respiratory or skin sensitization:	Skin sensitizer Hazard Category 1 according to EC 1272/2008 guidelines
Germ cell mutagenicity:	Not listed as mutagenic
Carcinogenicity:	Not listed as carcinogenic
Reproductive toxicity:	Not a reprotoxicant
STOT-single exposure:	Data not found
STOT-repeated exposure:	Data not found
Aspiration hazard:	Aspiration Hazard Category 1 under EC 1272/2008 guidelines
Other information:	Not photo-toxic

MATERIAL SAFETY DATA SHEET

Product: Clove Bud Essential Oil
Version: 1

SECTION 12: Ecological information

12.1 Toxicity:	Do not discharge into the environment. Not ecotoxicity not hazard listed under EC 1272/2008.
12.2 Persistence and degradability:	Data not found
12.3 Bio-accumulative potential:	Data not found
12.4 Mobility in soil:	Data not found
12.5 Results of PBT and vPvB assessment:	N/A
12.6 Other adverse effects:	N/A

SECTION 13: Disposal considerations

13.1 Waste treatment methods:

Do not release into the environment. Collect waste into suitable containers and contact hazardous chemical disposal company.

SECTION 14: Transport information

Warning Icon	Exempt from labelling.
Proper Shipping Name	Not registered
UN No. Road	Not classified for transport.
ADR Class	Not applicable
Hazard No (ADR):	Not applicable
Hazchem Code:	Not applicable
UN No. SEA	Not classified for transport.
IMDG Class	Not applicable
IMDG Pack Gr.	Not applicable
EMS	Not applicable
UN No. AIR	Not classified for transport.
Air Class	Not applicable
Air Pack Gr.	Not applicable

SECTION 15: Regulatory information

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

EU Directives	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18th Dec 2006 Concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 199/45/EC and repealing Council Regulation Council Regulation (EEC) No793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, and 93/105/EEC and 2000/21/EC including amendments.
Statutory Instrument	The Chemicals (Hazard Information and Packaging for Supply Regulations 2009 (S.I. 2009 No 716).
Approved Code of Practice	Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations
Guidance Notes	Workplace Exposure Limits EH40. CHIP for everyone HSG 108.

15.2 Chemical Safety Assessment

An assessment has not been executed as this is not a hazardous material according to article 31 of REACH 1907/2006.

MATERIAL SAFETY DATA SHEET

Product: Clove Bud Essential Oil
Version: 1

SECTION 16: Other information

Training instructions: Refer to possible hazard before use of this product

Abbreviations and acronyms:

Abbreviation	Meaning
ADN	International Carriage of Dangerous Goods by Inland Waterways
ADR	Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS	Chemical Abstract Service
c/c	Closed Cup
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
ICAO	International Civil Aviation Organization
IMDR	International Maritime Code for Dangerous Goods
INCI	International Nomenclature of Cosmetic Ingredients
MSDS	Material Safety Data Sheet
N/A	Not Available
RID	International Carriage of Dangerous Goods by Rail
STOT	Specific Target Organ Toxicity
Trem Card	Transport Emergency Card

Risk Phrases in Full:	R36 Irritating to eyes R43 May cause sensitisation by skin contact R65 Harmful: may cause lung damage if swallowed
Hazard Statements in Full:	H304 May be fatal if swallowed and enters airways H317 May cause an allergic skin reaction H319 Causes serious eye irritation

Complies with REACH guidance for SDS as circulated by ECHA 2011.

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.