



MATERIAL SAFETY DATA SHEET

1.0 – Chemical Product and Company Information

Product name: Clove Bud Pure Essential Oil Chemical formula: Pure Essential Oil	Company Name: Tropical Bioessence Sdn. Bhd. (683554V) No. ST 519, Jalan Tunas Baru Seksyen 1/4, Kawasan Perindustrian MIEL Masjid Tanah, 78300 Melaka Malaysia. Tel: +606-3842800, Fax: +606-3842900
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2.0 – Composition/Information on Ingredients

Name	CAS #	%
Clove Bud (Syzygium aromaticum) Essential oil	8000-34-8	100%
Other ingredients	-	-

3.0 – Hazards Identification

Slightly Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available.

Repeated or prolonged exposure is not known to aggravate medical condition.

4.0 – First Aid Measures

Eyes: Flush with plenty of water or eye wash solution for 15 minutes. Get medical attention if irritation persists.

Skin: Remove contaminated clothing. Wash with soap and flush with plenty of water. Seek medical attention if irritation persists.

Ingestion: Administer water or milk to dilute. Seek medical attention immediately or call a poison control center.

Inhalation: Avoid gross inhalation of fumes. Remove to fresh air and seek medical attention if needed.

5.0 – Fire-Fighting Measures

Flammability of the Product: Not available.

Auto-Ignition Temperature: Not available.

Flash Points: 195°C

Flammable Limits: Not available.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not available.

Explosion Hazards in Presence of Various Substances: Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

6.0 – Accidental Release Measures

Small Spill: Absorb with an inert material and put the spilled material in an appropriate waste disposal.

Large Spill: Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

7.0 – Handling and Storage

Precautions: Keep away from heat. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.

Storage: Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat.

8.0 – Exposure Controls / Personal Protection

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection: Splash goggles. Lab coat. Vapor respirator. Gloves.

Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product.

Exposure Limits: Not available.

9.0 – Physical and Chemical Properties

Physical State: Liquid, Oil

Color: Yellowish

Odor: Spicy and warm

Vapor Pressure (mm Hg.): Not available

Flash Point: 90-115°C

Boiling Point: 250°C

Melting Point: Not available

Specific Gravity (H₂O = 1): 1.038

Refractive Index @ 25°C: 1.528

Solubility in Water: Insoluble

10.0 – Stability and Reactivity

Section 10: Stability and Reactivity Data Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances: Not available.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: No.

11.0 – Toxicological Information

Routes of Entry: Eye contact. Inhalation. Ingestion.

Toxicity to Animals: Not available.

Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans: Slightly Hazardous in case of skin contact (irritant), of ingestion, of inhalation. Non-hazardous in case of skin contact (permeator).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

12.0 – Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely.

Toxicity of the Products of Biodegradation: The products of degradation are more toxic.

Special Remarks on the Products of Biodegradation: Not available.

13.0 – Disposal Considerations

No special methods are necessary, but disposal should be in accordance with local regulations

14.0 – Transport Information

DOT Classification: Not a DOT controlled material

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

15.0 – Regulatory Information

Federal and State Regulations: Not available.

Other Regulations: Not available.

DSCL (EEC): Not available.

HMIS (U.S.A.):

Health Hazard: 1

Fire Hazard: 1

Reactivity: 0

Personal Protection: b

Health: 1

Flammability: 1

Reactivity: 0

Specific hazard:

Protective Equipment: Gloves. Lab coat. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

Section 16 – Other Information

This information is provided for documentation purposes only.

The complete range of conditions or methods of use are beyond our control therefore we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate however, all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local laws and local regulations remains the responsibility of the user.

This safety sheet cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers.