# Clove Oil Extract (Syzygium aromaticum) – Eugenyl Acetate 4–15%

*Syzygium aromaticum · Myrtaceae*

| DOCUMENT | PRODUCT CODE | DOCUMENT NO. | REVISION |
|---|---|---|---|
| Safety Data Sheet | AP1178 | SDS-AP1178 | 1.0 · 24 October 2026 |

FORMAT
UN GHS Rev. 10 · US OSHA HCS (2024) · EU REACH Annex II

## 1 Identification of the substance/mixture and of the company

| | |
|---|---|
| Product identifier | Clove Oil Extract (Syzygium aromaticum) – Eugenyl Acetate 4–15% |
| Product code | AP1178 |
| Other names | Clove |
| Recommended use | Raw material for the manufacture of nutraceuticals & supplements products. Industrial and professional use only. |
| Uses advised against | Not for direct use by consumers as supplied. Not for medicinal use unless the user holds the required authorisation. |
| Supplier | CHOLAD PRIVATE LIMITED (trading as Extrakte)<br>C 22/4, 2nd & 3rd Floor, Sector-57, Noida-201301, Uttar Pradesh, India |
| Telephone / e-mail | +91 817 8117 600 · choladco@gmail.com · extrakte.com |
| Emergency telephone | 24-hour emergency (CHOLAD PRIVATE LIMITED): +91 81781 17600. Medical advice: National Poisons Information Centre, AIIMS New Delhi (24 h): 1800 116 117 (toll-free in India) / +91 11 2658 9391; outside India, your national poison centre. |

## 2 Hazard identification

### 2.1 Classification (UN GHS / EU CLP Regulation (EC) No 1272/2008 / US OSHA HCS 29 CFR 1910.1200, as amended 2024)

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| H226 | Flammable liquids, Category 3 — Flammable liquid and vapour. |

### 2.2 Label elements

GHS02

Signal word
**WARNING**

#### Hazard statements

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|---|---|
| H226 | Flammable liquid and vapour. |

#### Precautionary statements

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|---|---|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P233 | Keep container tightly closed. |
| P240 | Ground and bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ventilating/lighting equipment. |

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| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. |
| P370+P378 | In case of fire: Use water spray, foam, dry chemical or CO2 to extinguish. |
| P403+P235 | Store in a well-ventilated place. Keep cool. |
| P501 | Dispose of contents/container in accordance with local, regional, national and international regulations. |

### 2.3 Other hazards

- Contains volatile and/or oxidisable constituents. Vapours or mists may cause irritation in poorly ventilated areas.
- PBT / vPvB assessment: not carried out (botanical substance of unknown or variable composition).

**Basis of classification.** Calculated for the product at its highest grade using the GHS mixture rules (additivity formula and generic concentration limits), from the classification of: Eugenyl acetate (PubChem CID 7136; up to 15%): H302 — ECHA C&L Inventory aggregated notifications (codes reported by ≥50% of notifiers).

## 3 Composition / information on ingredients

Botanical essential oil fraction of *Syzygium aromaticum* (a substance of unknown or variable composition, UVCB), standardised as stated on the label (Typical 4–15%). For classification it is treated as a mixture of its constituents.

| COMPONENT | CAS | CONCENTRATION | CLASSIFICATION (PURE COMPONENT) |
|---|---|---|---|
| Extract of *Syzygium aromaticum* (flower) | — | to 100% | Not classified as a whole |
| Eugenyl acetate | 93-28-7 | ≤ 15% | H302 |

Concentrations refer to the highest grade offered. Full text of H-statements in section 16.

## 4 First-aid measures

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| Inhalation | Move to fresh air and keep at rest. Get medical advice if symptoms such as coughing or breathing difficulty persist. |
| Skin contact | Remove contaminated clothing immediately. Wash with plenty of soap and water. Get medical advice if irritation or rash develops. |
| Eye contact | Rinse cautiously with water for at least 15 minutes, holding eyelids open; remove contact lenses if easy to do. Get medical advice if irritation persists. |
| Ingestion | Rinse mouth with water. Do not induce vomiting unless directed by medical personnel. Get medical advice if a large amount is swallowed or if you feel unwell. |
| Most important symptoms | No specific symptoms known. |
| Immediate medical attention | Not normally required. Treat symptomatically. |

## 5 Fire-fighting measures

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| Suitable extinguishing media | Water spray, alcohol-resistant foam, dry chemical powder, carbon dioxide. |
| Unsuitable extinguishing media | High-volume water jet (may spread burning liquid). |
| Specific hazards | Flammable liquid and vapour; vapours may travel to an ignition source. Hazardous combustion products: carbon monoxide, carbon dioxide. |
| Advice for firefighters | Wear self-contained breathing apparatus and full protective clothing. Cool containers exposed to fire with water spray. |

## 6 Accidental release measures

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| Personal precautions | Use the personal protective equipment in section 8. Remove ignition sources. Ensure adequate ventilation. |
| Environmental precautions | Prevent large quantities entering drains or watercourses. |
| Methods for clean-up | Absorb with inert material (sand, diatomaceous earth, universal binder). Place in labelled, closed containers for disposal (section 13). Wash the area with water. |

## 7 Handling and storage

### Precautions for safe handling

- Avoid contact with skin and eyes and inhalation of vapours or mists.
- Use with local exhaust ventilation at points where dust or vapour may be generated.
- Do not eat, drink or smoke in work areas; wash hands after handling.
- Keep away from heat, sparks and open flames; use non-sparking tools and explosion-protected equipment.

### Conditions for safe storage

- Store tightly closed below 25 °C, protected from light and heat.
- After opening, blanket with nitrogen and use promptly to limit oxidation.
- Keep away from strong oxidising agents.

## 8 Exposure controls / personal protection

### Control parameters

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| Product | No occupational exposure limits established. |

### Exposure controls

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| Engineering controls | Local exhaust ventilation; general ventilation for small quantities. |
| Eye / face | Safety glasses with side shields (EN 166 / ANSI Z87.1). |
| Hands | Nitrile rubber gloves, ≥ 0.11 mm (EN ISO 374); change when contaminated. |
| Body | Laboratory coat or protective work clothing. |
| Respiratory | Combination filter type A-P2 where vapours or mists may be generated. |
| Hygiene | Wash hands before breaks and at the end of work. Keep work clothing separate. |

## 9 Physical and chemical properties

| | |
|---|---|
| Physical state | Liquid / viscous liquid |
| Colour / appearance | Colourless to pale yellow mobile liquid |
| Odour | Characteristic |
| Odour threshold | No data available |
| Melting point / range | No data available |
| Boiling point / range | No data available |
| Flammability | Flammable liquid |
| Lower / upper explosion limit | No data available |

| | |
|---|---|
| Flash point | Expected below 60 °C — to be measured (ISO 2719 / ISO 3679) |
| Auto-ignition temperature | No data available |
| Decomposition temperature | No data available |
| pH | Not applicable |
| Kinematic viscosity | No data available |
| Solubility | Insoluble to sparingly soluble in water; soluble in oils and ethanol |
| Partition coefficient n-octanol/water | No data available |
| Vapour pressure | No data available |
| Density | Typically 0.85–1.05 g/mL at 20 °C |
| Particle characteristics | Not applicable |

## 10 Stability and reactivity

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|---|---|
| Reactivity | No dangerous reactions known under normal conditions of use. |
| Chemical stability | Stable under the recommended storage conditions. |
| Possibility of hazardous reactions | None known. |
| Conditions to avoid | Heat, direct sunlight, moisture, ignition sources. |
| Incompatible materials | Strong oxidising agents. |
| Hazardous decomposition products | See section 5. |

## 11 Toxicological information

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|---|---|
| Acute toxicity | Based on available data, the classification criteria are not met. |
| Skin corrosion / irritation | Based on available data, the classification criteria are not met. |
| Serious eye damage / irritation | Based on available data, the classification criteria are not met. |
| Respiratory or skin sensitisation | Based on available data, the classification criteria are not met. |
| Germ cell mutagenicity | Based on available data, the classification criteria are not met. |
| Carcinogenicity | Based on available data, the classification criteria are not met. |
| Reproductive toxicity | Based on available data, the classification criteria are not met. |
| STOT – single exposure | Based on available data, the classification criteria are not met. |
| STOT – repeated exposure | Based on available data, the classification criteria are not met. |
| Aspiration hazard | Based on available data, the classification criteria are not met. |

### Information on constituents

- Eugenyl acetate ($C_{12}H_{14}O_3$, CAS 93-28-7, PubChem CID 7136): reported classification H302 — ECHA C&L Inventory aggregated notifications (codes reported by ≥50% of notifiers).

## 12 Ecological information

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|---|---|
| Toxicity | No data available. Not classified as hazardous to the aquatic environment. |
| Persistence and degradability | Botanical material; expected to be biodegradable. |

| | |
|---|---|
| Bioaccumulative potential | No data available. |
| Mobility in soil | No data available. |
| PBT / vPvB | Not assessed. |
| Other adverse effects | Avoid release to the environment in large quantities. |

## 13 Disposal considerations

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|---|---|
| Product | Dispose of via a licensed waste contractor in accordance with local, regional and national regulations. Treat as hazardous waste. |
| Packaging | Empty containers completely; recycle or dispose of in the same way as the product. |
| Sewage disposal | Do not discharge to drains. |

## 14 Transport information

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| UN number | UN1169 |
| UN proper shipping name | EXTRACTS, AROMATIC, LIQUID |
| Transport hazard class | 3 |
| Packing group | III |
| Environmental hazard | No |
| Regulations | ADR/RID, IMDG Code, IATA DGR, US DOT 49 CFR |
| Note | Derived from the calculated hazard classification. Packing group I applies if the measured LD50/LC50 falls in Category 1. Limited/excepted-quantity provisions may apply to small packs; the shipper must confirm before dispatch and show the 24-hour emergency response number +91 81781 17600 (24 h) on the transport documents. |

## 15 Regulatory information

- EU REACH: botanical extract (UVCB substance). The EU importer must confirm the registration or exemption status for the import route.
- US TSCA: inventory status not determined; the importer must confirm before import for non-exempt uses (food, supplement, cosmetic and drug uses are outside TSCA).
- Chemical safety assessment: not carried out.

## 16 Other information

| | |
|---|---|
| Revision | 1.0 — first issue, 24 October 2026 |
| Prepared by | CHOLAD PRIVATE LIMITED (Extrakte) — choladco@gmail.com |
| Key data sources | PubChem (NIH) GHS classification summaries of the ECHA C&L Inventory and EU CLP Annex VI; supplier product specifications. |
| Training advice | Handle only after reading this SDS. Users should be trained in the handling of liquid raw materials and chemical raw materials. |

**Full text of H-statements referred to in sections 2 and 3**

| | |
|---|---|
| H226 | Flammable liquid and vapour. |

| | |
|---|---|
| H302 | Harmful if swallowed. |

Abbreviations: ACGIH – American Conference of Governmental Industrial Hygienists; ATE – acute toxicity estimate; CID – PubChem compound identifier; CLP – Regulation (EC) No 1272/2008; GHS – Globally Harmonized System; OSHA – US Occupational Safety and Health Administration; PEL – permissible exposure limit; STOT – specific target organ toxicity; TLV – threshold limit value.

This Safety Data Sheet was prepared by CHOLAD PRIVATE LIMITED (trading as Extrakte) on the basis of the product's composition and published classification data for its marker constituents (PubChem GHS summaries of ECHA C&L Inventory notifications and EU CLP Annex VI harmonised entries). It describes the product as supplied, for professional and industrial users, and does not replace the user's own risk assessment. The information is believed to be correct at the date of issue but is given without warranty. Certificates of Analysis are issued per lot and are available on request.