



SAFETY DATA SHEET

CL-185 CLOVE LEAF OIL RECTIFIED 85%+
Revision Date Nov 23, 2017

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Version #02

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product name : CLOVE LEAF OIL RECTIFIED 85%+
CAS/EU CAS : 8000-34-8/84961-50-2
EINECS : 284-638-7
FEMA/GRAS : 2325

1.2 Other means of identification

IPC No. : CL-185

1.3 Relevant identified uses of the substance or mixture and uses advised against

Recommended use : Flavor and Fragrances
Recommended restrictions : For Manufacturing Use Only

1.4 Manufacturer details

Company name : PT. Van Aroma
Address : Jl. Raya Cicadas No. 16 (Jl. Raya Mercedes Benz)
RT 04 RW 04, Cicadas, Gunung Putri, Bogor 16964 – Jawa Barat
INDONESIA
Phone : +62-21-8677003
Fax : +62-21-8677002
Email : info@vanaroma.com
Website : www.vanaroma.com

1.4 Emergency phone number

+62-812-9185-762

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with EC No. 1272/2008

Physical hazards : Not classified
Health hazards : Aspiration Hazard Category 1
Acute Toxicity Dermal Category 5
Acute Toxicity Oral Category 5
Eye Damage/Irritation Category 2A
Skin Corrosion/Irritation Category 3
Skin Sensitization Category 1B
Environmental hazards : Hazardous to the Aquatic Environment Category Acute 2

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2.2 GHS Label elements, including precautionary statements



Pictogram:

Signal word: Danger

Hazard statement(s):

- H303 – May be harmful if swallowed
- H304 – May be fatal if swallowed and enters airways
- H313 – May be harmful in contact with skin
- H316 – Causes mild skin irritation
- H317 – May cause an allergic skin reaction
- H319 – Causes serious eye irritation
- H401 – Toxic to aquatic life

Precautionary statement(s):

- P280 – Wear protective gloves/protective clothing/eye protection/face protection
- P302+P352 – IF ON SKIN: Wash with plenty of water
- P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P333+P313 – If skin irritation or a rash occurs: Get medical advice/attention
- P337+P313 – If eye irritation persists: Get medical advice/attention

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Mixtures

Chemical name	Common name/synonyms	CAS-No	Concentration
Clove leaf oil	Essential oil is obtained by steam distillation from leaves of <i>Eugenia caryophyllata</i> (Family: Myrtaceae)	8000-34-8	100%

Additional components

Chemical name	Common name/synonyms	CAS-No	Concentration
Eugenol	4-Allyl-2-methoxyphenol 2-Methoxy-4-(2-propenyl)-phenol 1-Hydroxy-2-methoxy-4-allylbenzene	97-53-0	75-95%
Beta-caryophyllene	(1R,4E,9S)-4,11,11-trimethyl-8-methylidenebicyclo[7.2.0]undec-4-ene	87-44-5	5-15%



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4. FIRST-AID MEASURES

4.1 Description of first aid measures

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

Inhalation

If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or persist.

Skin contact

Take off immediately all contaminated clothing. Get medical attention if irritation develops and persists. Wash skin thoroughly with soap and water for several minutes.

Eye contact

Remove contact lenses, if present and easy to do so. Get medical attention if irritation develops and persists. Promptly wash eyes with plenty of water while lifting the eye lids.

Ingestion

Call a physician or poison control center immediately. If swallowed rinse mouth with water (only if the person is conscious). Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs.

4.2 Most important symptoms and effects, both acute and delayed

Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

4.3 Indication of immediate medical attention and special treatment needed

Not available.

5. FIREFIGHTING MEASURES

5.1 Suitable extinguishing media

Water spray, fog, CO₂, dry chemical, or alcohol resistant foam.

5.2 Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

5.3 Specific hazards arising from the chemical

Fire may produce irritation, corrosive and/or toxic gases.

5.4 Special protective equipment and precautions for fire-fighters

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection. Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires.



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5.5 Fire-fighting equipment/instructions

In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage. Ventilate closed spaces before entering them. Keep run-off water out of sewers and water sources. Dike for water control.

5.6 Specific methods

Use water spray to cool unopened containers.

5.7 General fire hazards

Static charges generated by emptying package in or near flammable vapor may cause flash fire.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Eliminate all sources of ignition. Avoid contact with skin or inhalation of spillage, dust or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them.

6.2 Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps.

The product is immiscible with water and will spread on the water surface.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Prevent product from entering drains. Do not allow material to contaminated ground water system. Absorb in vermiculite, dry sand or earth and place into containers.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. This material and its container must be disposed of a hazardous waste.

Collect and dispose of as hazardous waste. Collect and dispose of spillage as indicated in section 13 of the SDS.

6.3 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid release to the environment. Retain and dispose of contaminated wash water. Contact local authorities in case of spillage to drain/aquatic environment.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Do not handle or store near an open flame, heat or other sources of ignition. All equipment used when handling the product must be grounded. Avoid contact with eyes, skin and clothing. Avoid prolonged exposure. Wash thoroughly after handling. Take precautionary measures against static discharges. Avoid breathing vapor.



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7.2 Conditions for safe storage, including any incompatibilities

Keep containers closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Occupational exposure limits

No exposure limits noted for ingredient(s).

8.2 Biological limit values

No biological exposure limits noted for the ingredient(s).

8.3 Appropriate engineering controls

Use explosion-proof ventilation equipment to stay below exposure limits.

8.4 Individual protection measures, such as personal protective equipment

Eye/face protection

Safety glasses with side shields or goggles. Face shield is recommended.

Skin and body protection

Chemical resistant gloves. Use of an impervious apron is recommended.

Respiratory protection

Not required. If ventilation is insufficient, suitable respiratory protection must be provided.

Thermal hazards

Wear appropriate thermal protective clothing when necessary.

General hygiene considerations

Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state/color)	:	Colorless to pale yellow liquid
Odor	:	Somewhat harsh, phenolic, only slightly sweet
Odor threshold	:	N/A
pH	:	N/A
Melting point/freezing point	:	N/A
Initial boiling point and boiling range	:	N/A
Flash Point (Closed Cup)	:	>93°C
Evaporation Rate	:	N/A
Flammability (solid, gas)	:	N/A
Upper/lower flammability	:	N/A
Explosive limit	:	N/A



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Vapor pressure	:	N/A
Vapor density	:	N/A
Relative density	:	N/A
Solubility in Water	:	Insoluble
Solubility in Alcohol	:	1 vol. clear soluble in 2 vol. of 80% Ethanol
Partition coefficient (n-octanol/water)	:	N/A
Auto-ignition temperature	:	N/A
Decomposition temperature	:	N/A
Other information		
Refractive index	:	1.525 – 1.535 @ 20°C
Specific gravity	:	1.025 – 1.050 @ 25°C
Optical rotation	:	N/A

10. STABILITY AND REACTIVITY

10.1 Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2 Chemical stability

Material is stable under normal conditions.

10.3 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

No hazardous decomposition products if stored and handled as indicated.

11. TOXICOLOGICAL INFORMATION

11.1 Information on likely routes of exposure

Inhalation

No adverse effects due to inhalation are expected.

Skin contact

Causes mild skin irritation. May cause allergic skin reaction.

Eye contact

Causes serious eye irritation



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Ingestion

May be harmful if swallowed. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

11. 2 Symptoms related to the physical, chemical and toxicological characteristics

Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling and blurred vision. Skin irritation. May cause redness and pain. May cause allergic skin reaction. Dermatitis. Rash.

11. 3 Information on toxicological effects

Acute toxicity

May be fatal if swallowed and enters airways. May be harmful in contact with skin. May cause an allergic skin reaction.

Skin corrosion/irritation

Causes mild skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory sensitization

Not a respiratory sensitizer.

Skin sensitization

May cause an allergic skin reaction.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

Not classified.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity – single exposure

Not classified.

Specific target organ toxicity – repeated exposure

Not classified.

Aspiration hazard

May be fatal if swallowed and enters airways.



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12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.2 Persistence and degradability

No data available on the degradability of this product.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. DISPOSAL CONSIDERATIONS

13.1 Disposal instructions

Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

13.2 Local disposal regulations

Dispose in accordance with all applicable regulations.

13.3 Hazardous waste code

Not established.

13.4 Waste from residues/unused products

Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

13.5 Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. TRANSPORT INFORMATION

International Carriage of Dangerous Goods by Road (ADR)

Not regulated as dangerous goods.

Air Transport (ICAO/IATA)

Not regulated as dangerous goods.



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Sea Transport (IMDG)

Not regulated as dangerous goods.

15. REGULATORY INFORMATION

15.1 US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

16. OTHER INFORMATION

16.1 References

1. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
2. IFRA/IOFI Labeling Manual 2016

16.2 Revision date, version #, information

November 23rd, 2017, version #02. Updating SDS according to GHS format.

16.3 Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purpose.