SAFETY DATA SHEET (SDS)

Prepared in accordance with the Globally Harmonized System (GHS) and Regulation (EC) No. 1907/2006 (REACH, as amended)

SECTION 1: Identification

Parameter	Details
Product Name	Patchouli Terpenes
Alternative Names	Patchouli Oil Terpenes; Patchouli Terpene Fraction
Botanical Source	*Pogostemon cablin* (Blanco) Benth.
Botanical Family	Lamiaceae
INCI Reference	Pogostemon Cablin Leaf Oil
Product Type	Natural Terpene Fraction / Natural Complex Substance
Plant Part	Leaves and aerial parts
Production Method	Fractionation or rectification of patchouli essential oil
CAS Number	84238-39-1
EC Number	282-493-4
Country of Origin	Spain
Physical Form	Liquid

1.2 Relevant Identified Uses

- Professional perfumery
- Fine-fragrance formulation
- Fragrance compounding
- Cosmetic fragrance applications
- Soap and detergent fragrance
- Home-fragrance products
- Incense and aromatic products
- Research and product development

1.3 Uses Advised Against

- Internal consumption
- Pharmaceutical or medicinal use
- Food or flavour use unless separately approved
- Direct undiluted application to skin
- Use by children
- Use without an appropriate finished-product safety assessment

1.4 Supplier Details

Aromology Trading LLC
G05 Al Ghazal Building
Nadd Al Hamar
Dubai, United Arab Emirates

Website: www.aromology.com
Email: info@aromology.com
Telephone: +971 505197601

1.5 Emergency Telephone Number

Contact the nearest Poison Control Centre, emergency medical service or suitably qualified medical professional.

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

Representative classification according to Regulation (EC) No. 1272/2008:

Hazard Class	Category	Hazard Statement
Flammable Liquid	Category 3	H226
Skin Irritation	Category 2	H315
Skin Sensitisation	Category 1	H317
Aspiration Hazard	Category 1	H304
Aquatic Acute	Category 1	H400
Aquatic Chronic	Category 1	H410

Hazard Statements

- H226: Flammable liquid and vapour.
- H304: May be fatal if swallowed and enters airways.
- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H400: Very toxic to aquatic life.
- H410: Very toxic to aquatic life with long-lasting effects.

The exact classification depends on the composition of the terpene fraction, particularly the concentrations of hydrocarbon sesquiterpenes and any sensitising constituents.

2.2 Label Elements

Signal Word

Danger

Hazard Pictograms

- GHS02 – Flame
- GHS07 – Exclamation Mark
- GHS08 – Health Hazard
- GHS09 – Environment

Hazard Statements

- H226 Flammable liquid and vapour.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H410 Very toxic to aquatic life with long-lasting effects.

Precautionary Statements

- P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P233: Keep container tightly closed.
- P261: Avoid breathing vapours, mist or spray.
- P264: Wash hands thoroughly after handling.
- P273: Avoid release to the environment.
- P280: Wear protective gloves, protective clothing and eye protection.
- P301+P310: IF SWALLOWED: Immediately call a POISON CENTRE or doctor.
- P331: Do NOT induce vomiting.
- P302+P352: IF ON SKIN: Wash with plenty of soap and water.
- P333+P313: If skin irritation or rash occurs: Get medical advice.
- P370+P378: In case of fire: Use foam, dry powder or carbon dioxide to extinguish.
- P391: Collect spillage.
- P403+P235: Store in a well-ventilated place. Keep cool.
- P405: Store locked up.
- P501: Dispose of contents and container in accordance with applicable regulations.

2.3 Other Hazards

- Natural composition varies according to the original patchouli oil and fractionation process.
- Oxidised terpenes may exhibit increased irritation and sensitisation potential.

- Vapours may form flammable mixtures with air.
- Spilled material may create a slipping hazard.
- The complete substance is not expected to meet PBT or vPvB criteria based on representative information.
- No endocrine-disrupting properties have been established for the complete Natural Complex Substance.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance / Natural Complex Substance

Component	CAS Number	EC Number	Content
Patchouli Terpenes	84238-39-1	282-493-4	100%

3.2 Representative Naturally Occurring Constituents

Constituent Group	Representative Range
Sesquiterpene Hydrocarbons	60–90%
Guaiene Isomers	15–35%
Patchoulene Isomers	10–30%
Seychellene	5–15%
β-Caryophyllene	1–8%
Other Natural Terpenes	Balance
Patchouli Alcohol	Trace–10%, depending on fractionation

The exact chromatographic profile must be confirmed through batch-specific GC/MS analysis.

SECTION 4: FIRST-AID MEASURES

4.1 Description of First-Aid Measures

After Inhalation

- Move the affected person to fresh air.
- Keep the person warm and at rest.
- Obtain medical advice if headache, dizziness, coughing or respiratory irritation persists.

After Skin Contact

- Remove contaminated clothing and footwear.
- Wash the affected skin thoroughly with soap and plenty of water.
- Do not use solvents to clean the skin.
- Obtain medical advice if irritation, redness or rash develops.

After Eye Contact

- Rinse cautiously with clean water for at least 15 minutes.
- Remove contact lenses if present and easy to do.
- Continue rinsing while holding the eyelids open.
- Obtain medical advice if irritation persists.

After Ingestion

- Immediately contact a Poison Centre or physician.
- Do not induce vomiting.
- Rinse the mouth carefully.
- Keep the affected person at rest.
- Never give anything by mouth to an unconscious person.

Aspiration into the lungs may cause chemical pneumonitis and may be fatal.

4.2 Most Important Symptoms and Effects

Possible symptoms include:

- Skin irritation
- Allergic skin reaction
- Eye discomfort
- Headache
- Dizziness
- Nausea
- Vomiting
- Coughing
- Breathing difficulty
- Chemical pneumonitis following aspiration

4.3 Indication of Immediate Medical Attention

Immediate medical attention is required following ingestion or suspected aspiration.

Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Suitable Extinguishing Media

Use:

- Carbon dioxide
- Dry chemical powder
- Alcohol-resistant foam
- Water fog for cooling exposed containers

5.2 Unsuitable Extinguishing Media

Do not use a direct high-pressure water jet, as it may spread the burning liquid.

5.3 Specific Hazards

Vapours may travel to an ignition source and flash back.

Combustion or thermal decomposition may produce:

- Carbon monoxide
- Carbon dioxide
- Dense smoke
- Irritating organic vapours
- Unidentified decomposition products

5.4 Advice for Firefighters

- Wear self-contained breathing apparatus.
- Wear full protective clothing.
- Cool fire-exposed containers with water spray.
- Prevent contaminated fire-fighting water from entering drains or waterways.
- Approach the fire from upwind where practical.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions

- Remove all ignition sources.
- Ensure adequate ventilation.
- Keep unnecessary personnel away.
- Avoid breathing vapours or mist.

- Avoid contact with skin and eyes.
- Wear suitable gloves, protective clothing and eye protection.
- Use non-sparking tools where appropriate.
- Exercise caution because spilled material may create slippery surfaces.

6.2 Environmental Precautions

- Prevent entry into drains, soil, groundwater and surface water.
- Contain significant spills.
- Notify the appropriate authority if an uncontrolled environmental release occurs.

6.3 Methods for Containment and Cleaning

- Stop the leak where safe to do so.
- Contain with sand, earth, vermiculite or another inert absorbent.
- Collect absorbed material in a sealed and labelled waste container.
- Use non-sparking equipment.
- Clean the affected surface with detergent and water.
- Do not use combustible absorbents such as sawdust.
- Dispose of waste through an authorised contractor.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling

- Handle in a well-ventilated area.
- Avoid breathing vapours, mist and aerosols.
- Avoid prolonged or repeated skin contact.
- Prevent contact with eyes.
- Keep away from flames, sparks and hot surfaces.
- Use grounded equipment during bulk transfer where appropriate.
- Take precautions against static discharge.
- Do not eat, drink or smoke in handling areas.
- Wash hands thoroughly after use.
- Keep containers tightly closed when not in use.
- Use clean, dry and compatible dispensing equipment.
- Avoid release to the environment.
- Minimise exposure to air to reduce oxidation.

7.2 Conditions for Safe Storage

Store:

- In tightly closed original or compatible containers
- In a cool, dry and well-ventilated area
- Protected from direct sunlight
- Away from heat and ignition sources
- Away from strong oxidising agents
- Preferably between 5°C and 20°C
- With minimum headspace where practical

Suitable container materials may include:

- Aluminium
- Stainless steel
- Fluorinated HDPE
- Amber glass
- Suitably lined metal containers

7.3 Specific End Uses

For professional perfumery and fragrance formulation.

Safe use levels must be established through an appropriate IFRA review and finished-product safety assessment.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters

No occupational exposure limit has been established for the complete Natural Complex Substance.

Exposure to vapours, aerosols and direct contact should be minimised.

8.2 Engineering Controls

- Provide adequate general ventilation.
- Use local exhaust ventilation for bulk transfer, heating or aerosol generation.
- Use explosion-resistant ventilation equipment where significant vapour concentrations may occur.
- Provide accessible eyewash and washing facilities.

8.3 Personal Protective Equipment

Eye and Face Protection

Wear chemical safety goggles.

Use a face shield where splash exposure is possible.

Hand Protection

Wear chemical-resistant gloves, such as:

- Nitrile rubber
- Neoprene
- Butyl rubber

Skin and Body Protection

Wear suitable protective clothing to prevent repeated or prolonged contact.

Respiratory Protection

Normally not required under adequate ventilation.

Use an approved organic-vapour respirator where:

- Ventilation is inadequate
- The material is heated
- Mist or aerosol is generated
- Significant vapour exposure may occur

Hygiene Measures

- Wash hands and exposed skin after handling.
- Remove contaminated clothing.
- Wash contaminated workwear before reuse.
- Keep away from food, beverages and animal feed.

Environmental Exposure Controls

Prevent uncontrolled release into drains, soil and waterways.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Representative Information
Physical State	Liquid

Appearance	Clear mobile liquid
Colour	Colourless to pale yellow or light amber
Odour	Dry, woody, earthy, green, terpenic and patchouli-like
Odour Threshold	Not determined
Melting / Freezing Point	Not determined
Initial Boiling Point	Not determined for the natural mixture
Flammability	Flammable liquid and vapour
Lower Explosive Limit	Not determined
Upper Explosive Limit	Not determined
Flash Point	Approximately 55–75 °C
Auto-Ignition Temperature	Not determined
Decomposition Temperature	Not determined
pH	Not applicable
Kinematic Viscosity	Not determined
Water Solubility	Insoluble or practically insoluble
Solubility in Ethanol	Soluble
Vapour Pressure	Low to moderate at ambient temperature
Relative Density at 20 °C	Approximately 0.890–0.940
Refractive Index at 20 °C	Approximately 1.490–1.515
Optical Rotation	Batch dependent
Partition Coefficient	Expected to be high due to terpene content
Particle Characteristics	Not applicable

All values are representative. Batch-specific Certificate of Analysis results take precedence.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reactivity is expected under normal handling conditions.

10.2 Chemical Stability

Stable when stored tightly closed and protected from heat, light, moisture and air.

10.3 Possibility of Hazardous Reactions

Hazardous polymerisation is not expected.

May react strongly with oxidising agents.

10.4 Conditions to Avoid

Avoid:

- Heat
- Direct sunlight
- Flames and sparks
- Static discharge
- Prolonged exposure to air
- Moisture contamination
- Repeated heating
- Cross-contamination

10.5 Incompatible Materials

- Strong oxidising agents
- Strong acids
- Strong alkalis
- Reactive halogen compounds

10.6 Hazardous Decomposition Products

Thermal decomposition may produce:

- Carbon monoxide
- Carbon dioxide
- Dense smoke
- Irritating organic vapours

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Hazard Classes

Acute Toxicity

No complete batch-specific acute-toxicity data are available.

The product is not expected to have high acute oral or dermal toxicity under normal industrial handling.

Skin Corrosion / Irritation

Causes skin irritation.

Serious Eye Damage / Irritation

Direct contact may cause temporary eye irritation.

Respiratory or Skin Sensitisation

May cause an allergic skin reaction.

Oxidation products of naturally occurring terpenes may increase sensitisation potential.

Germ-Cell Mutagenicity

No classification established for the complete Natural Complex Substance.

Carcinogenicity

No classification established for the complete substance.

Reproductive Toxicity

No classification established for the complete substance.

Specific Target Organ Toxicity – Single Exposure

Excessive vapour exposure may cause headache, dizziness or respiratory discomfort.

Specific Target Organ Toxicity – Repeated Exposure

No classification established based on available representative information.

Aspiration Hazard

May be fatal if swallowed and enters airways.

11.2 Likely Routes of Exposure

- Skin contact
- Eye contact
- Inhalation
- Accidental ingestion

11.3 Symptoms Related to Exposure

- Skin irritation
- Allergic rash
- Eye irritation
- Headache
- Dizziness
- Nausea
- Coughing
- Breathing difficulty following aspiration
- Chemical pneumonitis

11.4 Endocrine-Disrupting Properties

No endocrine-disrupting properties have been established for the complete product.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Very toxic to aquatic life with long-lasting effects.

12.2 Persistence and Degradability

Complete batch-specific biodegradation data are not available.

Individual terpene constituents may biodegrade at different rates.

12.3 Bioaccumulative Potential

Lipophilic terpene hydrocarbons may have the potential to bioaccumulate.

12.4 Mobility in Soil

The product is poorly soluble in water and is expected to adsorb to soil and sediment.

12.5 PBT and vPvB Assessment

The complete Natural Complex Substance is not expected to meet PBT or vPvB criteria based on representative information.

12.6 Endocrine-Disrupting Properties

No confirmed endocrine-disrupting properties have been identified.

12.7 Other Adverse Effects

Avoid uncontrolled release into the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

- Dispose of unused product through an authorised chemical-waste contractor.
- Do not discharge into drains, waterways or soil.
- Incineration may be appropriate where legally permitted.
- Dispose of contaminated absorbents as hazardous chemical waste.
- Empty containers may retain flammable vapours and hazardous residues.

13.2 Contaminated Packaging

Dispose of or recycle packaging in accordance with local regulations after appropriate cleaning.

Do not cut, weld, drill or burn uncleaned containers.

Do not reuse contaminated containers for food, beverages or household purposes.

SECTION 14: TRANSPORT INFORMATION

Transport Parameter	Details
UN Number	UN 3082
UN Proper Shipping Name	Environmentally Hazardous Substance, Liquid, N.O.S.
Technical Name	Patchouli Terpenes
Transport Hazard Class	9
Packing Group	III
Environmental Hazard	Yes
Marine Pollutant	Yes
ADR / RID	Class 9, UN 3082
IMDG	Class 9, UN 3082
IATA	Class 9, UN 3082
EmS Code	F-A, S-F
Limited Quantity	Subject to applicable transport provisions
Bulk Transport	Not intended for bulk maritime transport

Where the batch flash point falls within applicable flammable-liquid transport criteria, an alternative or additional transport classification may apply. The original manufacturer's current SDS and measured flash point must be consulted before shipping.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations

Prepared with reference to:

- Regulation (EC) No. 1907/2006 – REACH
- Regulation (EU) 2020/878
- Regulation (EC) No. 1272/2008 – CLP
- Regulation (EC) No. 1223/2009 on cosmetic products
- Regulation (EU) 2023/1545 concerning fragrance-allergen labelling
- Current IFRA Standards
- ADR
- RID
- IMDG
- IATA dangerous-goods provisions

15.2 Chemical Safety Assessment

A formal chemical safety assessment has not been carried out by Aromology Trading LLC for the complete Natural Complex Substance.

Finished-product manufacturers are responsible for:

- Reviewing the original manufacturer's current SDS
- Confirming batch-specific GC/MS composition
- Confirming the measured flash point
- Confirming transport classification
- Calculating applicable IFRA restrictions
- Assessing fragrance-allergen labelling
- Determining safe finished-product use levels
- Conducting the finished cosmetic-product safety assessment

SECTION 16: OTHER INFORMATION

16.1 Full Text of Hazard Statements

- H226: Flammable liquid and vapour.
- H304: May be fatal if swallowed and enters airways.
- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H400: Very toxic to aquatic life.
- H410: Very toxic to aquatic life with long-lasting effects.

16.2 Abbreviations

Abbreviation	Meaning
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging Regulation
EC	European Community
GC/MS	Gas Chromatography–Mass Spectrometry
IATA	International Air Transport Association
IFRA	International Fragrance Association
IMDG	International Maritime Dangerous Goods Code
INCI	International Nomenclature of Cosmetic Ingredients
NCS	Natural Complex Substance
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
vPvB	Very Persistent and Very Bioaccumulative

16.3 Recommended Shelf Life

24 months from the manufacturing date when stored unopened under recommended conditions.

16.4 Issue Date

23 July 2026

16.5 Revision

Version 1.0

DISCLAIMER

This Safety Data Sheet has been prepared using representative botanical, compositional and safety information for Patchouli Terpenes – Spain, CAS 84238-39-1.

Patchouli Terpenes is a fractionated Natural Complex Substance. Its exact composition, physical properties, flash point and hazard classification may vary according to:

- Source patchouli oil
- Botanical origin
- Harvest conditions
- Distillation process
- Fractionation method
- Degree of rectification
- Storage conditions
- Oxidation
- Individual production batch

The assigned CAS number identifies the patchouli-derived botanical material but does not by itself define the precise terpene-fraction composition.

The original manufacturer's current:

- Safety Data Sheet
- Certificate of Analysis
- GC/MS report
- Flash-point result
- IFRA statement
- Allergen declaration
- Transport classification

shall take precedence wherever available.

This product is supplied exclusively as a professional perfumery raw material. It is not intended for internal consumption, medicinal use, food use or direct undiluted skin application.

Aromology Trading LLC accepts no responsibility for inappropriate handling, storage, formulation, transport, labelling or use outside the recommended professional applications.

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