



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	Pistachio Peel Essential Oil
Alternative Names	Pistachio Hull Essential Oil; Pistachio Fruit Peel Oil
Botanical Name	<i>Pistacia vera</i> L.
Botanical Family	Anacardiaceae
Plant Part	Fresh outer fruit peel / hull
Extraction Method	Steam or hydrodistillation
Product Type	Natural Essential Oil / Natural Complex Substance
CAS Number	Not specifically assigned or confirmed
EC Number	Not specifically assigned or confirmed
Physical State	Liquid
Grade	Professional Perfumery Grade

Pistacia vera is the accepted botanical name for the cultivated pistachio species and belongs to the Anacardiaceae family.

1.2 Relevant Identified Uses

- Professional perfumery
- Fragrance formulation
- Cosmetic fragrance ingredient
- Soap and personal-care products
- Home-fragrance products
- Research and product development

1.3 Uses Advised Against

- Internal consumption
- Food or flavour use without appropriate approval
- Direct undiluted application to the skin
- Pharmaceutical use without authorisation
- Use by children
- Household use by untrained persons

1.4 Supplier Details

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



Website: www.aromology.com

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1.5 Emergency Telephone Number

Contact the nearest Poison Centre, emergency medical service or qualified physician.

SECTION 2: HAZARDS IDENTIFICATION

2.1 Representative Classification

Because no harmonised classification specific to pistachio peel essential oil was identified, the following conservative classification is based on the expected presence of volatile monoterpenes such as pinene, limonene, phellandrene and related constituents.

Hazard Class	Category	Hazard Statement
Flammable Liquid	Category 3	H226
Aspiration Hazard	Category 1	H304
Skin Irritation	Category 2	H315
Skin Sensitisation	Category 1	H317
Eye Irritation	Category 2	H319
Aquatic Chronic Hazard	Category 2	H411

2.2 Label Elements

Signal Word: Danger

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.
- H319: Causes serious eye irritation.
- H411: 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 vapour or mist.
- P264: Wash thoroughly after handling.



- P272: Contaminated work clothing should not be allowed out of the workplace.
- 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 physician.
- 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.
- P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses where easy to do. Continue rinsing.
- P370+P378: In case of fire, use alcohol-resistant foam, dry chemical or carbon dioxide.
- P391: Collect spillage.
- P403+P235: Store in a well-ventilated place. Keep cool.
- P501: Dispose of contents and container according to applicable regulations.

2.3 Other Hazards

- Natural composition varies according to cultivar, origin, ripeness and distillation method.
- Oxidation may increase sensitisation potential.
- Concentrated vapours may cause headache, nausea or respiratory discomfort.
- Pistachio belongs to the Anacardiaceae family; individuals with known botanical or nut sensitivities should avoid unnecessary exposure.
- Spilled product may create a slipping hazard.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance

Component	Identifier	Concentration
Volatile oil obtained from the peel or hull of <i>Pistacia vera</i> fruit	Natural Complex Substance	Approximately 100%

3.2 Representative Natural Constituents

The following profile is representative only and must be confirmed by batch-specific GC/MS analysis.

Constituent Group	Representative Presence
α -Pinene	Major to moderate
β -Pinene	Moderate
Limonene	Moderate
α -Phellandrene	Moderate
β -Phellandrene	Minor to moderate
Terpinolene	Minor to moderate
Myrcene	Minor



Sabinene	Minor
p-Cymene	Minor
Terpinen-4-ol	Trace to minor
Other monoterpenes and sesquiterpenes	Balance

Pistacia species are aromatic plants, and volatile oils from the genus commonly contain monoterpenes such as α -pinene, limonene, p-cymene and terpinen-4-ol.

SECTION 4: FIRST-AID MEASURES

4.1 Description of First-Aid Measures

Inhalation

Move the affected person to fresh air.

Keep at rest in a position comfortable for breathing.

Obtain medical advice if coughing, dizziness, nausea, headache or breathing discomfort persists.

Skin Contact

Remove contaminated clothing.

Wash the affected area thoroughly with soap and plenty of water.

Seek medical advice if redness, irritation or rash develops.

Eye Contact

Rinse cautiously with clean water for at least 15 minutes.

Remove contact lenses where present and easy to do.

Continue rinsing and obtain medical attention if irritation persists.

Ingestion

Do not induce vomiting.

Immediately contact a Poison Centre or physician because of the potential aspiration hazard.

Never give anything by mouth to an unconscious person.

4.2 Most Important Symptoms and Effects



- Skin irritation
- Allergic skin reaction
- Eye irritation
- Headache or dizziness following excessive vapour exposure
- Nausea
- Chemical pneumonitis if aspirated into the lungs

4.3 Immediate Medical Attention

Treat symptomatically.

Vomiting should not be induced because aspiration into the lungs may cause serious injury.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Suitable Extinguishing Media

- Alcohol-resistant foam
- Dry chemical powder
- Carbon dioxide
- Water fog

5.2 Unsuitable Extinguishing Media

Do not use a direct high-pressure water jet.

5.3 Special Hazards

Combustion may produce:

- Carbon monoxide
- Carbon dioxide
- Irritating smoke
- Organic decomposition products

Vapours may form flammable mixtures with air.

Closed containers exposed to heat may rupture because of pressure build-up.

5.4 Advice for Firefighters

Wear self-contained breathing apparatus and full protective equipment.

Cool exposed containers with water spray from a safe distance.



Prevent contaminated firefighting water from entering drains or waterways.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions

- Eliminate ignition sources.
- Provide adequate ventilation.
- Avoid breathing vapours or mist.
- Avoid direct contact with skin and eyes.
- Wear suitable gloves, protective clothing and goggles.
- Keep unnecessary personnel away.

6.2 Environmental Precautions

Prevent entry into:

- Drains
- Surface water
- Groundwater
- Soil

Notify the relevant authority if a significant environmental release occurs.

6.3 Containment and Cleaning

Contain and absorb the spill with:

- Sand
- Vermiculite
- Diatomaceous earth
- Universal absorbent
- Other inert, non-combustible material

Transfer absorbed material to a suitable labelled waste container.

Wash the affected area with detergent and water after bulk recovery.

Do not flush concentrated material into drains.

SECTION 7: HANDLING AND STORAGE

7.1 Safe Handling



- Use in a well-ventilated area.
- Avoid breathing concentrated vapour.
- Avoid contact with skin and eyes.
- Keep away from heat, sparks and open flames.
- Do not smoke, eat or drink while handling.
- Use non-sparking equipment where appropriate.
- Ground and bond bulk-transfer equipment.
- Wash hands thoroughly after handling.
- Keep containers closed when not in use.

7.2 Storage Conditions

Store:

- Between 5°C and 20°C
- In tightly closed amber glass, aluminium or suitably lined containers
- In a cool, dry and well-ventilated place
- Protected from direct sunlight
- Protected from prolonged exposure to air
- Away from oxidising agents, acids and ignition sources

For bulk storage, inert-gas blanketing may help reduce oxidation.

7.3 Specific End Use

Professional perfumery, cosmetic and fragrance manufacture.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters

No occupational exposure limit has been established for the complete natural complex substance.

Occupational limits applicable to individual constituents should be observed where relevant.

8.2 Engineering Controls

- Provide adequate general ventilation.
- Use local exhaust ventilation where vapours or aerosols may be generated.
- Provide an accessible eyewash station.
- Provide emergency washing facilities in bulk-handling areas.

8.3 Personal Protective Equipment

Protection Type	Recommendation
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Eye Protection	Chemical safety goggles
Hand Protection	Nitrile or other chemical-resistant gloves
Skin Protection	Protective clothing or laboratory coat
Respiratory Protection	Organic-vapour respirator where ventilation is inadequate
Foot Protection	Closed, slip-resistant footwear
Hygiene	Wash hands before breaks and after handling

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Representative Specification
Physical State	Mobile oily liquid
Colour	Colourless to pale yellow, yellow-green or amber
Odour	Fresh green, resinous, nutty, fruity, terpenic and slightly balsamic
Relative Density at 20 °C	Approximately 0.850–0.920
Refractive Index at 20 °C	Approximately 1.460–1.490
Optical Rotation	Batch dependent
Flash Point	Expected approximately 40–65 °C
Initial Boiling Point	Not determined; complex mixture
Water Solubility	Insoluble or practically insoluble
Solubility in Ethanol	Soluble to dispersible
Vapour Pressure	Not determined
Auto-Ignition Temperature	Not determined
Explosive Properties	Vapours may form explosive mixtures with air
Oxidising Properties	Not classified as oxidising
Viscosity	Low-viscosity liquid

These values are provisional ranges for a volatile pistachio-hull distillate and should not be confused with fixed pistachio kernel oil, which is a triglyceride-rich pressed oil with substantially different physical properties. Pistachio kernel oil is generally reported around 0.915–0.920 relative density and 1.467–1.470 refractive index.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reaction is expected under normal conditions of use.

10.2 Chemical Stability

Stable when stored in tightly closed containers under recommended conditions.



10.3 Possibility of Hazardous Reactions

Oxidation, resinification or polymerisation may occur after prolonged exposure to:

- Air
- Light
- Heat
- Reactive contaminants

10.4 Conditions to Avoid

- Heat
- Sparks
- Open flames
- Direct sunlight
- Prolonged exposure to oxygen
- Electrostatic discharge

10.5 Incompatible Materials

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

10.6 Hazardous Decomposition Products

- Carbon monoxide
- Carbon dioxide
- Irritating organic fumes
- Smoke

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Likely Routes of Exposure

- Skin contact
- Eye contact
- Inhalation
- Accidental ingestion

11.2 Toxicological Effects

Endpoint

Acute Oral Toxicity

Assessment

Insufficient substance-specific data



Acute Dermal Toxicity	Insufficient substance-specific data
Acute Inhalation Toxicity	Insufficient substance-specific data
Skin Irritation	Expected to cause irritation in concentrated form
Serious Eye Damage/Irritation	Expected to cause eye irritation
Skin Sensitisation	Possible due to oxidisable terpene constituents
Respiratory Sensitisation	No adequate data available
Germ-Cell Mutagenicity	No adequate data available
Carcinogenicity	No adequate data available
Reproductive Toxicity	No adequate data available
STOT—Single Exposure	High vapour concentrations may cause transient discomfort
STOT—Repeated Exposure	No adequate data available
Aspiration Hazard	Expected because of low-viscosity hydrocarbon constituents

11.3 Additional Information

Repeated or prolonged skin exposure may cause dermatitis or sensitisation.

Oxidised monoterpenes may have a greater sensitising potential than freshly produced material.

Essential oils should not be applied undiluted to the skin and may be harmful if swallowed or aspirated.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Concentrated essential oil may be toxic to aquatic organisms.

Avoid uncontrolled environmental release.

12.2 Persistence and Degradability

Many naturally occurring terpene constituents are biodegradable, although degradation rates vary by component and environmental conditions.

12.3 Bioaccumulative Potential

Hydrophobic terpene constituents may have some potential for bioaccumulation.

12.4 Mobility in Soil

Low water solubility may cause adsorption to soil and sediment.

12.5 PBT and vPvB Assessment



No complete assessment is available for the natural complex substance.

12.6 Other Adverse Effects

Large releases may form a surface film on water and reduce oxygen transfer.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of the product through an authorised chemical-waste contractor.

Do not discharge into:

- Drains
- Waterways
- Soil
- General municipal waste in concentrated form

Empty containers may retain flammable vapours and hazardous residues.

Do not cut, weld or burn uncleaned containers.

Dispose of contaminated packaging according to local regulations.

SECTION 14: TRANSPORT INFORMATION

Because no batch-specific flash-point report was supplied, the following is a provisional transport classification.

Transport Information	Provisional Classification
UN Number	UN 1993
Proper Shipping Name	Flammable Liquid, N.O.S. (contains terpenes)
ADR/RID Class	3
IMDG Class	3
IATA Class	3
Packing Group	III
Environmental Hazard	To be determined from batch composition
Marine Pollutant	Verify against batch-specific classification
EmS	Verify with current transport documentation
Tunnel Restriction Code	Verify with current ADR documentation

The final transport classification must be confirmed using:



- Batch-specific flash point
 - Exact GC/MS composition
 - Manufacturer's current SDS
 - Applicable ADR, IMDG and IATA criteria
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SECTION 15: REGULATORY INFORMATION

This document has been 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 — Cosmetics
- Current IFRA Standards
- ADR dangerous-goods regulations
- IMDG Code
- IATA Dangerous Goods Regulations

No harmonised EU classification specific to pistachio peel essential oil was confirmed at the time of preparation.

SECTION 16: OTHER INFORMATION

Full 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.
- H319: Causes serious eye irritation.
- H411: Toxic to aquatic life with long-lasting effects.

Shelf Life

24 months from the production date when stored in unopened original packaging under recommended conditions.

Identification Note

No unique and reliably verified CAS or EC number was identified specifically for steam-distilled Pistachio Peel Essential Oil.

A CAS number assigned to pistachio seed oil, nut oil, fixed oil or a broad botanical extract should not automatically be used for this volatile peel distillate without confirmation from the original manufacturer.



DISCLAIMER

This Safety Data Sheet has been prepared using representative technical and regulatory information for Pistachio Peel Essential Oil obtained from Pistacia vera fruit hulls.

As a Natural Complex Substance, its constituent profile, physical properties and regulatory classification may vary according to:

- Cultivar
- Geographical origin
- Fruit maturity
- Harvest season
- Peel condition
- Distillation method
- Storage history
- Production batch

The original manufacturer's batch-specific SDS, Certificate of Analysis, GC/MS report, flash-point test, IFRA Certificate and EU Allergen Declaration shall take precedence where available.

This product is supplied exclusively as a professional perfumery and cosmetic raw material. It is not intended for internal consumption, must not be used undiluted on the skin and must be kept away from children.

AUTHORISED BY

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