

Material Safety Data Sheet

According to EU Regulation 1907/2006 in the current version

BLACK PEPPER ESSENTIAL OIL

1. Identification of the substance/mixture and company

Trade name: Black pepper essential oil
Natural product obtained by steam distillation of the crushed dried berries of black pepper.
I.N.C.I. Piper Nigrum fruit oil
CAS No. : 84929-41-9
EINESCS No. : 284-524-7
REACH pre-registration No. : 01-2120740133-68
Utilization: Aromatic raw material for cosmetic or professional use
Supplier company identification: Elemental SRL, Piața Cazărmii no.15, 410188-Oradea, jud.Bihor, Romania
Tel/Fax: +40259-436.755, www.elemental.eu
Emergency: RO: număr național pentru cazuri de urgență: 021 3183606 Institutul de Sănătate Publică București.
International emergency number: +49 180 2273-112

2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to EC Reg. 1272/2008 (Norm. GHS-CLP)

Flammable liquids, Category 3

Skin corrosion/irritation, Category 2

Skin sensitization, category 1B

Aspiration hazard, Category 1

Hazardous to the aquatic environment — Chronic Hazard, Category 2

The full text of the risk phrases and precautionary phrases cited below is shown in point 16 of this sheet.

Hazards: H226 – H315 – H317 – H304 – H411

Precautions: P210 – P331 – P301+P310 – P303+P361+P353 – P280 – P501

Special instructions: none

Adverse physicochemical, human health and environmental effects

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

2.2 Label elements

Hazard pictograms:



Hazard statement:

H226 – Flammable liquid and vapor.

H304 – May be fatal if swallowed and enters airways.

H315 – Causes skin irritation.

H317 – May cause an allergic skin reaction.

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H411 – Toxic to aquatic life with long lasting effects.

Precautionary statement:

P210 – Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P331 – Do NOT induce vomiting.

P301+P310 – IF SWALLOWED: Immediately call a POISON CENTER or doctor.

P303+P361+P353 – IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P280 – Wear protective gloves/protective clothing/eye protection/face protection.

P501 – Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Special instructions: none

2.3 Other hazards

No additional information available.

3. Declaration of ingredients

3.1. Substances

The product contains the following components to declare:

Substance	Product identifier	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Percent %
Black pepper essential oil 100% natural	(CAS-No.) 84929-41-9 (EC-No.) 284-524-7 (REACH-no) 01-2120740133-68	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	100%

3.2 Mixtures:

Not applicable

4. First aid measures

4.1 Description of first aid measures

In case of contact with skin: Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

In case of contact with eyes: Rinse eyes with water as a precaution.

In case of inhalation: Remove person to fresh air and keep comfortable for breathing.

In case of ingestion: Do not induce vomiting. Call a doctor immediately.

4.2 Main symptoms and effects, both acute and delayed

Symptoms/effects after skin contact: Irritation. May cause an allergic skin reaction.

Symptoms/effects after ingestion: Risk of lung oedema.

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4.3 Indication to consult a physician immediately or any special treatments
Treat symptomatically.

5. Fire fighting measures

5.1 Means of extinction

Suitable extinguishing media: Dry powder, foam, carbon dioxide.

Unsuitable extinguishing media: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Fire hazard: Flammable liquid and vapor.

Hazardous decomposition products in case of fire: Toxic fumes may be released.

5.3 Recommendations for fire-fighters

Protection during firefighting: Do not attempt to take action without suitable protective equipment: self-contained breathing apparatus, complete protective clothing.

6. Accidental release measures

6.1 Personal precautions, protective devices and emergency procedures

For non-emergency personnel

- Emergency procedures: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.

For emergency responders

- Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8.

6.2 Environmental precautions

Avoid release to the environment.

6.3 Methods and materials for containment and remediation

For containment: Collect spillage.

Methods for cleaning up: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information: Dispose of materials or solid residues at an authorized site.

6.4 Reference to other sections

For further information refer to section 13.

7. Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.

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Hygiene measures: Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures: Ground/bond container and receiving equipment.

Storage conditions: Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

7.3 Specific end uses

No additional information available.

8. Exposure controls / personal protection

8.1 Control parameters

Handle in accordance with good industrial hygiene and safety practice.

8.2 Exposure controls

Hand protection: Protect hands with category I work gloves (ref. Directive 89/686 / EEC and standard EN 374) such as latex, PVC or equivalent.

Skin protection: Wear work clothes with long sleeves and safety footwear for professional use of category I (ref. Directive 89/686 / EEC and standard EN 344). Wash with soap and water after removing protective clothing.

Respiratory protection: Use protective masks. The use of respiratory protection is necessary in the absence of technical measures to limit worker exposure.

Eye protection: it is recommended to wear airtight protective goggles (ref. Standard EN 166).

8.3 Environmental exposure controls

Environmental protection legislation for every country must be observed.

9. Physical and chemical properties

9.1 Information on physical and chemical properties

Physical state: liquid

Appearance: liquid at room temperature

Color: colorless, yellow, greenish

Odor: fresh, woody, spicy

Odor threshold: No data available

pH: Not relevant

Relative evaporation rate (butylacetate=1): No data available

Melting point: Not applicable

Freezing point: No data available

Boiling point: No data available

Flash point: 47 °C

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Flammability (solid, gas): Not applicable

Vapor pressure: No data available

Relative vapor density at 20 °C: No data available

Relative density: 0.864 - 0.886

Solubility: No data available

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Log Pow: No data available
Viscosity, kinematic: < 20 mm²/s
Viscosity, dynamic: No data available
Explosive properties: No data available
Oxidizing properties: No data available
Explosive limits: No data available

9.2 Other information

Refractive index: 1.478 - 1.491

10. Stability and reactivity

10.1 Responsiveness

Flammable liquid and vapor.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of dangerous reactions

No dangerous reactions known under normal conditions of use.

10.4 Conditions to avoid

Avoid contact with hot surfaces. No heat, no flames, no sparks. Eliminate all sources of ignition.

10.5 Incompatible materials

No additional information available.

10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity (oral): Not classified

Acute toxicity (dermal): Not classified

Acute toxicity (inhalation): Not classified

Black pepper essential oil

LD50 oral rat > 5000 mg/kg

LD50 dermal rabbit > 5000 mg/kg

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/irritation: Not classified

Respiratory or skin sensitization: May cause an allergic skin reaction.

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

STOT-single exposure: Not classified

STOT-repeated exposure: Not classified

Aspiration hazard: May be fatal if swallowed and enters airways.

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Viscosity, kinematic: < 20 mm²/s

12. Ecological information

12.1 Toxicity

Ecology - general: Very toxic to aquatic life with long lasting effects.

Acute aquatic toxicity: Not classified

Chronic aquatic toxicity: Toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

No additional information available.

12.3 Bioaccumulation potential

No additional information available.

12.4 Ground mobility

No additional information available.

12.5 Results of PBT and vPvB assessment

No additional information available.

12.6 Other adverse effects

No additional information available.

13. Disposal considerations

13.1 Waste treatment methods

Always recover spilled product. Discard waste material with authorized waste management services. Act in accordance with local and national waste regulations.

14. Transport information

ADR / RID	IMDG	IATA
		

14.1 UN number

ADR: 1169

IMDG: 1169

IATA: 1169

14.2 UN shipping name

ADR: EXTRACTS, AROMATIC, LIQUID

IMDG: EXTRACTS, AROMATIC, LIQUID

IATA: EXTRACTS, AROMATIC, LIQUID

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14.3 Class of danger for transport

ADR: 3

IMDG: 3

IATA: 3

14.4 Packing group

ADR: III

IMDG: III

IATA: III

14.5 Environmental hazards

ADR: - Dangerous for the environment: Yes

IMDG: - Dangerous for the environment: Yes - Marine pollutant: Yes

IATA: - Dangerous for the environment: Yes

14.6 Special precautions for users

Overland transport

Classification code (ADR): F1

Special provisions (ADR): 601

Limited quantities (ADR): 5I

Excepted quantities (ADR): E1

Packing instructions (ADR): P001, IBC03, LP01, R001

Mixed packing provisions (ADR): MP19

Portable tank and bulk container instructions (ADR): T2

Portable tank and bulk container special provisions (ADR): TP1

Tank code (ADR): LGBF

Vehicle for tank carriage: FL

Transport category (ADR): 3

Special provisions for carriage - Packages (ADR): V12

Special provisions for carriage - Operation (ADR): S2

Hazard identification number (Kemler No.): 30

Orange plates:



Tunnel restriction code (ADR): D/E

EAC code: 3YE

Transport by sea

Special provisions (IMDG): 223, 955

Limited quantities (IMDG): 5 L

Excepted quantities (IMDG): E1

Packing instructions (IMDG): P001, LP01

IBC packing instructions (IMDG): IBC03

Tank instructions (IMDG): T2

Tank special provisions (IMDG): TP1

EmS-No. (Fire): F-E

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EmS-No. (Spillage): S-D

Stowage category (IMDG): A

Properties and observations (IMDG): Usually consist of alcoholic solutions. Miscibility with water depends upon the composition.

Air transport

PCA Excepted quantities (IATA): E1

PCA Limited quantities (IATA): Y344

PCA limited quantity max net quantity (IATA): 10L

PCA packing instructions (IATA): 355

PCA max net quantity (IATA): 60L

CAO packing instructions (IATA): 366

CAO max net quantity (IATA): 220L

Special provisions (IATA): A3

ERG code (IATA): 3L

Inland waterway transport

Classification code (ADN): F1

Special provisions (ADN): 601

Limited quantities (ADN): 5 L

Excepted quantities (ADN): E1

Equipment required (ADN): PP, EX, A

Ventilation (ADN): VE01

Number of blue cones/lights (ADN): 0

Rail transport

Classification code (RID): F1

Special provisions (RID): 601

Excepted quantities (RID): E1

Packing instructions (RID): P001, IBC03, LP01, R001

Mixed packing provisions (RID): MP19

Portable tank and bulk container instructions (RID): T2

Portable tank and bulk container special provisions (RID): TP1

Tank codes for RID tanks (RID): LGBF

Transport category (RID): 3

Special provisions for carriage – Packages (RID): W12

Colis express (express parcels) (RID): CE4

Hazard identification number (RID): 30

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

Not applicable

15. Regulatory information

15.1 Regulations and legislation on health, safety and environment specific to the substance or mixture

No REACH Annex XVII restrictions

Black pepper essential oil is not on the REACH Candidate List.

Black pepper essential oil is not on the REACH Annex XIV List.

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Black pepper essential oil is not subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Black pepper essential oil is not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

15.2 Chemical safety assessment.

No chemical safety assessment has been carried out.

16. Additional information

16.1 Abbreviations:

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Test-ing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration as-sociated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; INCI: International Nomenclature of Cosmetic Ingredients; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; PNEC: Predicted No Effect Concentration; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; STE: Short-term exposure; STEL: Short Term Exposure limit; STOT: Specific Target Organ Toxicity; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

16.2 Full text of H- and EUH-statements:

Aquatic Chronic 2 Hazardous to the aquatic environment — Chronic Hazard, Category 2

Asp. Tox. 1 Aspiration hazard, Category 1

Flam. Liq. 3 Flammable liquids, Category 3

Skin Irrit. 2 Skin corrosion/irritation, Category 2

Skin Sens. 1B Skin sensitisation, category 1B

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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.
H411 Toxic to aquatic life with long lasting effects

DECLARATION OF ALLERGENS

7th Amendment to Directive 76/768/EC, annex III, part I (2003/15/EC)

indicates natural cosmetic allergens according to regulation (EC) 1223/2009 of 30 November

2009 on cosmetic products, annex III. Values are maxima relative percents at the best of our knowledge

I.N.C.I.	C.A.S.	Max %
Alpha-Hexyl cinnamic aldehyde (HCA)	101-86-0	-
Amyl cinnamic alcohol	101-85-9	-
Amyl cinnamic aldehyde (ACA)	122-40-7	-
Anisyl alcohol	105-13-5	-
Benzyl salicylate	118-58-1	-
Benzyl benzoate	120-51-4	-
Benzyl cinnamate	103-41-3	-
Benzyl alcohol	100-51-6	≤ 0.1000
Cinnamic alcohol	104-54-1	-
Cinnamic aldehyde	104-55-2	-
Citral	5392-40-5	≤ 0.0500
Citronellol	106-22-9	≤ 0.0100
Coumarin (2p-1-benzopyran-2-one)	91-64-5	-
d-Limonene	5989-27-5	≤ 17.0000
Eugenol	97-53-0	≤ 0.1000
Farnesol	4602-84-0	≤ 0.0100
Geraniol	106-24-1	-
Lylal (Hydroxymethylpentyl cyclohexene carbaldoxaldehyde)	31906-04-4	-
Hydroxycitronellal	107-75-5	-
Isoeugenol	97-54-1	≤ 0.0100
alpha-Iso-methyl ionone	127-51-5	-
Linalool	78-70-6	≤ 0.7000
Methyl heptine carbonate	12/06/11	-
Oakmoss absolute	9000-50-4	-

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p-tert-Butyl-alpha- methylhydrocinnamic aldehyde	80-54-6	-
Tree moss	68648-41-9	-

Disclaimer:

This material safety data sheet does not constitute a guarantee of the properties of the product and is not a contractual legal report. The information is given in good faith on the basis of our best knowledge of the product at the indicated time. However, we cannot accept responsibility or liability for any consequences arising from its use, no warranty for correctness and completeness is given. We caution the users against the incurred possible risks when the product is used at other ends than the use for which it was initially planned. It is the user's responsibility during handling, storage and product use to consult the main regulatory texts in force regarding workers and environment protection.