SAFETY DATA SHEET

CARDAMOM & ORRIS — 10% preparation in non-hazardous wax base
According to Regulation (EC) No 1907/2006 (REACH), Annex II, as amended by Regulation (EU) 2020/878

⚠ **NOTE:** This document applies to the final mixture containing 10% of CARDAMOM & ORRIS fragrance and 90% of non-hazardous wax base. Classification calculated by Eco Candle Project from the composition declared in the manufacturer's SDS for the pure fragrance (CLP calculation method, Regulation (EC) No 1272/2008, Annex I).

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product form	Mixture
Trade name	Preparation with CARDAMOM & ORRIS at 10%
UFI (pure fragrance)	F8M5-S0DW-900N-YN7S
Type of product	Perfumes, fragrances
Base	Non-hazardous, non-classified wax (e.g. soy, rapeseed, coconut or paraffin) — 90%

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

Identified uses	Scented candles, wax melts and scented waxes.
Uses advised against	Not for personal use. Not for direct application to skin. Cosmetic use only within the IFRA limits and with a cosmetic safety assessment.

1.3 Details of the supplier of the safety data sheet

Company	VEGTEAM, Lda. — Eco Candle Project
Address	R. Quinta de Santa Marta, Lojas EF, 1495-171 Algés, Portugal
E-mail	info@ecocandleproject.com
Website	www.ecocandleproject.com

1.4 Emergency telephone number

Emergency number	CIAV — Poison Information Centre (INEM): +351 800 250 250 (24 h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Result	MIXTURE CLASSIFIED AS HAZARDOUS — H317, H411
Aquatic hazard, chronic	Aquatic Chronic 2 — H411. 10 × M × Σ Chronic 1 + Σ Chronic 2 = 50.2% (≥ 25% → Chronic 2); 100 × M × Σ Chronic 1 + 10 × Σ Chronic 2 + Σ Chronic 3 = 504.1%.
Skin sensitisation	Skin Sens. 1 — H317. Tetramethyl acetyloctahydronaphthalenes (OTNE) 3.17% is ≥ the concentration limit (1% generic).
Eye irritation	Not classified — Σ Eye Irrit. 2 (≥ 1%) = 0.00% (threshold: 10%).
Skin irritation	Not classified — Σ Skin Irrit. 2 (≥ 1%) = 3.17% (threshold: 10%).
Aspiration hazard	Not classified — Σ Asp. Tox. 1 = 0.83% (threshold: 10%).
Acute toxicity (oral)	Not classified — ATE mix ≈ 452,489 mg/kg (threshold: 2000 mg/kg).
Acute toxicity (inhalation)	Not classified — ATE mix (dust/mist) ≈ 3,000.0 mg/L (Category 4: ≤ 5 mg/L).
Notes	The pure fragrance (100%) is classified H315, H317, H319 and H410 (WARNING). See Annex — Calculation record.

2.2 Label elements

GHS07

GHS09

Hazard pictograms	GHS07, GHS09
Signal word	Warning
Contains (hazard-determining)	Tetramethyl acetyloctahydronaphthalenes (OTNE)
Hazard statements	H317 May cause an allergic skin reaction. H411 Toxic to aquatic life with long lasting effects.
Supplemental information	EUH208 Contains Pentadecan-15-olide, Linalyl acetate, d-Limonene, Ethyl linalool, Citronellol, Linalool, alpha-Pinene, Methylenedioxyphenyl methylpropanal. May produce an allergic reaction.
Precautionary statements	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P261 Avoid breathing mist/vapours/spray. P273 Avoid release to the environment. P280 Wear protective gloves/eye protection/face protection. P302+P352 IF ON SKIN: Wash with plenty of water. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P391 Collect spillage. P501 Dispose of contents/container in accordance with local regulations.
Finished product	Candles: also apply the safety labelling of EN 15494. When supplied to consumers add P101/P102 and the name, address and telephone of the supplier.

2.3 Other hazards

The mixture contains no Substances of Very High Concern (SVHC) ≥ 0.1%, no PBT/vPvB substances (REACH Annex XIII) and no substances with endocrine-disrupting properties ≥ 0.1% (Delegated Regulation (EU) 2017/2100 / Regulation (EU) 2018/605).

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Mixture of fragrance substances. Hazardous components — concentrations refer to the FINAL mixture at 10% (manufacturer's values × 0.10):

Name	Identifiers	%	Classification (EC) No 1272/2008
Tetramethyl acetyloctahydronaphthalenes (OTNE)	CAS 54464-57-2 EC 259-174-3 REACH 01-2119489989-04	3.00 – 4.00	Skin Sens. 1B, H317; Skin Irrit. 2, H315; Aquatic Chronic 1, H410
Ethylene brassylate	CAS 105-95-3 EC 203-347-8 REACH 01-2119976314-33	1.00 – 1.50	Aquatic Chronic 3, H412
Linalyl acetate	CAS 115-95-7 EC 204-116-4 REACH 01-2119454789-19	0.250 – 0.500	Skin Sens. 1B, H317; Skin Irrit. 2, H315; Eye Irrit. 2, H319
d-Limonene	CAS 5989-27-5 EC 227-813-5	0.250 – 0.500	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Skin Sens. 1B, H317; Aquatic Acute 1, H400; Aquatic Chronic 3, H412
Pentadecan-15-olide	CAS 106-02-5 EC 203-354-6 REACH 01-2119987323-31	0.250 – 0.500	Skin Sens. 1B, H317; Aquatic Chronic 2, H411
Citronellol	CAS 106-22-9 EC 203-375-0 REACH 01-2119453995-23	0.100 – 0.250	Skin Sens. 1B, H317; Skin Irrit. 2, H315; Eye Irrit. 2, H319

Name	Identifiers	%	Classification (EC) No 1272/2008
7-Methoxy-3,7-dimethyloctan-2-ol	CAS 41890-92-0 REACH 01-2120763501-60	0.100 – 0.250	Skin Irrit. 2, H315; Eye Irrit. 2, H319
Linalool	CAS 78-70-6 EC 201-134-4 REACH 01-2119474016-42	0.100 – 0.250	Skin Sens. 1B, H317; Skin Irrit. 2, H315; Eye Irrit. 2, H319
Ethyl linalool	CAS 10339-55-6 EC 233-732-6 REACH 01-2119969272-32	0.100 – 0.250	Skin Sens. 1B, H317; Eye Irrit. 2, H319
alpha-Pinene	CAS 7785-26-4 EC 232-077-3 REACH 01-2119979519-16	0.050 – 0.100	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Acute Tox. 4 (oral), H302; Skin Irrit. 2, H315; Skin Sens. 1B, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410
Methylenedioxyphenyl methylpropanal	CAS 1205-17-0 EC 214-881-6 REACH 01-2120740119-58	0.050 – 0.100	Repr. 2, H361; Skin Sens. 1B, H317; Aquatic Chronic 2, H411
alpha-Cedrene	CAS 469-61-4 EC 207-418-4	0.050 – 0.100	Asp. Tox. 1, H304; Skin Irrit. 2, H315; Aquatic Acute 1, H400 (M = 10); Aquatic Chronic 1, H410 (M = 10)
Geraniol	CAS 106-24-1 EC 203-377-1 REACH 01-2119552430-49	0.010 – 0.050	Eye Dam. 1, H318; Skin Sens. 1, H317; Skin Irrit. 2, H315
gamma-Terpinene	CAS 99-85-4 EC 202-794-6 REACH 01-2120780478-40	0.010 – 0.050	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Repr. 2, H361; Aquatic Chronic 2, H411
beta-Pinene	CAS 18172-67-3 EC 242-060-2	0.010 – 0.050	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Skin Sens. 1B, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410
Geranyl acetate	CAS 105-87-3 EC 203-341-5 REACH 01-2119973480-35	0.010 – 0.050	Skin Sens. 1B, H317; Skin Irrit. 2, H315; Aquatic Chronic 3, H412
3-Carene	CAS 498-15-7 EC 207-856-6	0.010 – 0.050	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Acute Tox. 4 (inhalation), H332; Skin Irrit. 2, H315; Skin Sens. 1B, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410
Eucalyptol (1,8-cineole)	CAS 470-82-6 EC 207-431-5	0.010 – 0.050	Flam. Liq. 3, H226; Skin Sens. 1B, H317; Eye Irrit. 2, H319
alpha-Phellandrene	CAS 99-83-2 EC 202-792-5	0.010 – 0.050	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Sens. 1, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410
2,2,6-Trimethyl-α-propylcyclohexanepropanol	CAS 70788-30-6 REACH 01-2120085417-50	0.010 – 0.050	Skin Sens. 1B, H317
beta-Cedrene	CAS 546-28-1 EC 208-898-8	0.010 – 0.050	Asp. Tox. 1, H304; Aquatic Acute 1, H400 (M = 10); Aquatic Chronic 1, H410 (M = 10)
beta-Caryophyllene	CAS 87-44-5 EC 201-746-1 REACH 01-2120745237-53	0.010 – 0.050	Asp. Tox. 1, H304; Skin Sens. 1B, H317
alpha-Tocopherol	CAS 59-02-9 EC 200-412-2	0.010 – 0.050	Skin Sens. 1B, H317
Oxacyclohexadecen-2-one	CAS 34902-57-3 EC 422-320-3	0.010 – 0.050	Aquatic Acute 1, H400; Aquatic Chronic 1, H410
Coumarin	CAS 91-64-5 EC 202-086-7 REACH 01-2119949300-45	0.010 – 0.050	Skin Sens. 1B, H317; Acute Tox. 4 (oral), H302
Carvone	CAS 99-49-0 EC 202-759-5 REACH 01-2119962458-25	0.010 – 0.050	Skin Sens. 1B, H317

Name	Identifiers	%	Classification (EC) No 1272/2008
Neryl acetate	CAS 141-12-8 EC 205-459-2 REACH 01-2120748334-54	0.010 – 0.050	Skin Sens. 1B, H317
Cinnamal	CAS 104-55-2 EC 203-213-9	< 0.010	Skin Sens. 1A, H317 (SCL ≥ 0.01%); Skin Irrit. 2, H315; Eye Irrit. 2, H319; Aquatic Chronic 3, H412
Inert base	—	90	Not classified

Full text of H-statements: see Section 16.

SECTION 4: First aid measures

Eye contact	Rinse cautiously with water for at least 15 minutes, holding eyelids open. Remove contact lenses if easy to do. If eye irritation persists, seek medical advice.
Skin contact	Remove contaminated clothing. Wash skin with plenty of soap and water. If skin irritation or rash occurs, seek medical advice. Molten wax: cool immediately with cold water; do not remove adhering wax; seek medical attention for burns.
Inhalation	Move the person to fresh air and keep at rest. If symptoms persist, seek medical advice.
Ingestion	Rinse mouth. Do NOT induce vomiting. Contact the Poison Centre (CIAV 800 250 250) or a doctor.
Most important symptoms	May cause an allergic skin reaction.
Medical attention	Treat symptomatically.

SECTION 5: Firefighting measures

Suitable extinguishing media	Foam, dry chemical powder, carbon dioxide (CO_2).
Unsuitable extinguishing media	Water jet.
Special hazards	Combustion may release smoke, CO and CO_2. Prevent run-off from entering drains or watercourses.
Advice for firefighters	Self-contained breathing apparatus and full protective clothing.

SECTION 6: Accidental release measures

Personal precautions	Wear gloves and eye protection. Ensure ventilation. Remove ignition sources.
Environmental precautions	Prevent entry into drains, watercourses or soil.
Containment and cleaning up	Solid wax: collect mechanically. Molten wax: allow to solidify and scrape up.

SECTION 7: Handling and storage

7.1 Safe handling	Melt the wax with controlled heating and good ventilation. Add the fragrance at a moderate temperature (typically 75–85 °C, or as per the wax data sheet) and below the fragrance flash point (89 °C). Do not leave melting wax unattended. Wash hands after use.
7.2 Storage	Keep container tightly closed in a cool, dry, well-ventilated place (10–25 °C), protected from light, heat and ignition sources. Keep out of reach of children.
7.3 Specific end uses	See Section 1.2 and the IFRA certificate.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters	No occupational exposure limits for the components. DNEL/PNEC: not available for the mixture.
Engineering controls	Adequate general ventilation; local exhaust for heated or large-scale operations. Eyewash available.

Eye/face protection	Safety glasses with side shields or goggles (EN 166).
Hand protection	Chemical-resistant nitrile gloves (EN ISO 374), ≥ 0.2 mm. Molten wax: heat-resistant gloves (EN 407).
Respiratory protection	Not required with adequate ventilation; otherwise filter type A (EN 14387).

SECTION 9: Physical and chemical properties

Physical state	Solid at 20 °C (wax); liquid when molten
Odour	Characteristic — bergamot, orris, sandalwood
Flash point	Not determined for the preparation; pure fragrance 89 °C (closed cup)
Density	Depends on the base
Solubility	Insoluble in water

SECTION 10: Stability and reactivity

Reactivity / stability	Stable under normal conditions of use and storage. No dangerous reactions known.
Conditions to avoid	Heat, flames, ignition sources.
Incompatible materials	Strong oxidising agents.
Hazardous decomposition	In case of combustion: CO, CO_2 and smoke.

SECTION 11: Toxicological information

Acute toxicity (oral)	Not classified (ATE ≈ 452,489 mg/kg)
Acute toxicity (inhalation)	Not classified (ATE ≈ 3,000.0 mg/L)
Skin irritation	Not classified
Eye irritation	Not classified
Skin sensitisation	Skin Sens. 1 — H317
Aspiration hazard	Not classified
Mutagenicity, carcinogenicity, reproductive toxicity, STOT	Not classified

SECTION 12: Ecological information

12.1 Toxicity	Aquatic Chronic 2 — H411. Main contributors: tetramethyl acetyloctahydronaphthalenes (OTNE), alpha-Cedrene, beta-Cedrene, alpha-Pinene and pentadecan-15-olide.
12.2–12.7	No data for the mixture. No PBT/vPvB or endocrine-disrupting substances ≥ 0.1%. Do not allow to enter drains or watercourses.

SECTION 13: Disposal considerations

Product	Dispose of through a licensed waste operator according to local/national regulations. Do not discharge to drains.
Hazardous properties (waste)	HP13, HP14
Contaminated packaging	Empty completely; do not reuse; dispose of as unused product.

SECTION 14: Transport information

	ADR / RID	IMDG	IATA
14.1 UN number	UN 3082	UN 3082	UN 3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TETRAMETHYL ACETYLOCTAHYDRONAPHTHALENES)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TETRAMETHYL ACETYLOCTAHYDRONAPHTHALENES)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TETRAMETHYL ACETYLOCTAHYDRONAPHTHALENES)
14.3 Class	9	9	9
14.4 Packing group	III	III	III
14.5 Environmental hazards	Yes	Yes — marine pollutant	Yes

14.6 Special precautions: ADR tunnel code (-); limited quantity 5 L/5 kg; packages ≤ 5 L/5 kg are exempt from the environmentally hazardous substance provisions (ADR SP 375, IMDG 2.10.2.7). 14.7 Bulk (IMO): not applicable. Solid wax preparations: UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., Class 9, PG III. Finished candles are articles and are not regulated.

SECTION 15: Regulatory information

EU regulations	Regulation (EC) No 1272/2008 (CLP); Regulation (EC) No 1907/2006 (REACH); Regulation (EU) 2020/878.
SVHC / Annex XIV / Annex XVII	No SVHC ≥ 0.1%; no Annex XIV substances.
PCN / UFI	Classified for health hazards (H317): a PCN with its own UFI is required if this preparation is placed on the market; the fragrance UFI (F8M5-S0DW-900N-YN7S) can be declared as a component (MiM).
IFRA (51st)	Candles (Cat. 12): no restriction — 10% complies.

SECTION 16: Other information

Revision	Version 1.0 — Eco Candle Project edition, 16/10/2026. Based on the manufacturer's SDS for the pure fragrance (version 13.0 of 11/03/2024, issued 06/05/2024), allergen declaration and IFRA 51st Amendment certificate (06/05/2024). The manufacturer declares component concentrations as ranges. Exact values from the manufacturer's allergen declaration were used where available and the upper limit of the range otherwise (conservative); with these values the calculation reproduces the manufacturer's classification of the pure fragrance (H315, H317, H319, H410). The manufacturer has not issued SDSs for diluted preparations — the classifications of the 5%, 7%, 10% and 25% preparations were calculated by Eco Candle Project with the CLP calculation method. Classification of the 10% preparation calculated by Eco Candle Project.
Abbreviations	ATE = Acute Toxicity Estimate; UFI = Unique Formula Identifier; PCN = Poison Centre Notification; SCL = specific concentration limit; OTNE = tetramethyl acetyloctahydronaphthalenes; SVHC = Substance of Very High Concern.

Full text of H-statements (Sections 2 and 3):

H226 Flammable liquid and vapour. **H302** Harmful if swallowed. **H304** May be fatal if swallowed and enters airways. **H315** Causes skin irritation. **H317** May cause an allergic skin reaction. **H318** Causes serious eye damage. **H319** Causes serious eye irritation. **H332** Harmful if inhaled. **H361** Suspected of damaging fertility or the unborn child. **H400** Very toxic to aquatic life. **H410** Very toxic to aquatic life with long lasting effects. **H411** Toxic to aquatic life with long lasting effects. **H412** Harmful to aquatic life with long lasting effects.

This information is based on our current knowledge and on the manufacturer's data and describes the product for health, safety and environmental purposes only. Users must ensure suitability for their own application. If a different base is used, the classification must be recalculated.

ANNEX — Calculation record (10%)

Hazard class	Fragrance 100%	Calculation at 10% / threshold	Result at 10%
Acute toxicity (oral)	Not classified (ATE 45,249)	ATE ≈ 452,489 mg/kg / ≤ 2000	Not classified
Acute toxicity (inhalation)	Not classified (ATE 300.00 mg/L)	ATE ≈ 3,000.0 mg/L / ≤ 5	Not classified
Aspiration hazard	Not classified	Σ = 0.83% / ≥ 10%	Not classified
Skin irritation	Skin Irrit. 2	Σ = 3.17% / ≥ 10%	Not classified
Eye irritation	Eye Irrit. 2	Σ = 0.0% / ≥ 10%	Not classified
Skin sensitisation	Skin Sens. 1	tetramethyl acetyloctahydronaphthalenes (OTNE) 3.17% / ≥ 1%	Skin Sens. 1 — H317
Aquatic chronic	Aquatic Chronic 1	C2: 50.2%; C3: 504.1% / ≥ 25%	Aquatic Chronic 2 — H411
Physical hazards	Not classified (FP 89 °C)	FP > 60 °C	Not classified

Calculated from the composition declared in the manufacturer's SDS (100%). The same method reproduces the manufacturer's classification of the pure fragrance.