





1. Identification of the substances / mixture and of the company/undertaking.		
1.1 Product identifier: Cardamon Seed Oil		
Substance name:		
Biological Definition		
INCI Name	ELETTARIA CARDAMOMUM SEED OIL	
Synonyms & Trade Names		
EC NO: 288-922-1	CAS NO: 8000-66-6	EINECS CAS Number: 85940-32-5
Index No:	Reach Registration No:	
1.2 Relevant identified uses of the substance or mixture and uses advised against		
Identified uses: Multiple uses in the Flavour and Fragrance industries		
Uses advised against:		
1.3 Details of the supplier of the safety data sheet		
Company	Penny Price Aromatherapy Ltd	
	Unit D3 Radius Court	
	Maple Drive	
	Hinckley	
	Leicestershire LE10 3BE	
Email	info@penny-price.com	
1.4 Emergency Telephone Number	00 44 (0) 1455 251020 opening hours Mon – Thurs 9am – 5pm, Fri 9am – 2pm. <u>Or call NHS 111 or NHS 999</u>	

2. Hazards Identification			
2.1 Classification of the substance or mixture			
Classified according to Regulation (EC) 1272/2008 (CLP) as amended	Physical and Chemical Hazards	Flam. Liq. 3 -H226	
	Human Health	Skin Corr/ Irrit. 2 - H315	Skin Sens. 1 – H317
		Eye Dam / Irrit. 2 – H319	Asp. Hazard. 1 – H304
	Environment	Aquatic. Long Term. 2 – H411	
2.2 Label Element Labelling according to Regulation (EC) No.1272/2008:			
   			
Signal Word. DANGER			
Hazard statements.			
H226	Flammabale liquid and vapour	H304	Maybe fatal if swallowed and enters the airways.
H315	Causes skin irritation	H317	May cause an allergic skin reaction

H318	Causes serious eye damage	H319	Causes serious eye irritation.
H320	Causes eye irritation	H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects.		
Precautionary statements.			
P102	Keep out of reach of children.		
P210	Keep away from heat, sparks, open flames and hot surfaces. No smoking.		
P233	Keep container tightly closed.		
P240	Ground/bond container and receiving equipment.		
P241	Use explosion-proof electrical, ventilating and lighting equipment.		
P242	Use only non-sparking tools.		
P243	Take precautionary measures against static discharge.		
P261	Avoid breathing vapour or dust.		
P264	Wash hands and other contacted skin 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/eye protection/face protection.		
P301+P310	IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.		
P303+P361+P353	IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.		
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.		
P310	Immediately call a POISON CENTRE or doctor.		
P331	Do NOT induce vomiting.		
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.		
P337+P313	If eye irritation persists: Get medical advice/attention.		
P362	Take off contaminated clothing and wash before reuse.		
P363	Wash contaminated clothing before reuse.		
P370+P378	In case of fire: Use Carbon dioxide, dry chemical, foam for extinction		
P391	Collect spillage.		
P403+P235	Store in a well-ventilated place. Keep cool.		
P405	Store locked up.		
P501	Dispose of contents/container to approved disposal site, in accordance with local regulations.		
Supplementary Precautionary Statements:			
2.3 Other hazards – Results of PBT and vPvB According to Annex XIII	None		
Adverse Physico-chemical Properties			

Adverse Effects on Human Health

3. 1 Composition / information on ingredients:

Substances	Product Identifier		Cardamon Seed Oil
	EINCES CAS Number		85940-32-5
	CAS Number		8000-66-6
	EC Number		288-922-1
Contains:			
Substance name	Index number under CLP Annex VI	Weight % content (or range)	CL, M-Factor, ATE
Eucalyptol	CAS: 470-82-6 EC: 207-431-5	32.00%	Flam.Liq. 3 – H226 Skin Sens. 1B –H317
Linalyl Acetate	CAS: 115-95-7 EC: 204-116-4	8.00%	Skin Corr/ Irrit. 2 -H315 Eye Dam / Irrit. 2 – H319
Linalool	CAS: 78-70-6 EC: 201-134-4	5.00%	Skin Corr / Irrit. 2- H315 Eye Dam / Irrit. H319 Skin Sens. 1B – H317
d-Limonene	CAS: 5989-27-5 EC: 227-813-5	3.50%	Flam.Liq. 3 – H226 Skin Corr/ Irrit. 2 – H315 Skin Sens. 1B – H317 Asp. Hazard. 1 – H304 Aquatic Acute. 1 / Aquatic Chronic.1 – H410
Alpha Terpineol	CAS: 98-55-5 EC: 202-680-6	3.00%	Skin Corr / Irrit. 2 – H315 Eye Dam / Irrit. 2 - H319
Myrcene	CAS: 123- 35-3 EC: 204-622-5	3.00%	Flam.Liq. 3 -H226 Skin Corr / Irrit. 2 – H315 Eye Dam / Irrit. 3 – H319 Asp. Hazard. 1 – H304
Alpha Pinene	CAS: 80 -56-8 EC: 201-291-9	2.50%	Flam. Liq. 2 – H226 Skin Corr / Irrit. 2 - H315 Skin Sens. 1B – H317 Asp. Hazard. 1 – H304 Aquatic Acute. 1 / Aquatic Chronic. 1 – H410
Geraniol	CAS: 106-24-1 EC: 203-377-1	2.00%	Skin Corr / Irrit. 2 – H315 Eye Dam / Irrit. 1 – H318 Skin Sens. 1 - H317
Citral	CAS: 5392-40-5 EC: 226-394-6	1.50%	Skin Corr / Irrit. 2 – H315 Eye Dam / Irrit. 2 – H319 Skin Sens. 1B – H317
Nerolidol (Isomer Unspecified)	CAS: 7212-44-4 EC: 230-597-5	1.50%	Aquatic Acute. 1 – H410 Aquatic Chronic. 1 -H420
Terpinolene	CAS: 586-62-9 EC: 209-579-0	1.00%	Skin Sens. 1B – H317 Asp. Hazard. 1 – H304 Aquatic Acute. 1 / Aquatic Chronic. 1 – H410

Beta Pinene	CAS: 127-91-3 EC: 204-872-5	1.00%	Flam.Liq. 2 – H226 Asp. Hazard. 1 – H304 Skin Corr / Irrit. 2 – H315 Skin Sens. 1B – H317 Aquatic Acute / Aquatic Chronic. 1 – H410
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4. First Aid Measures

4.1 General	Immediately remove any clothing soiled by the product.
Inhalation	Remove person to fresh air and keep comfortable for breathing. Obtain medical attention if required.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If irritation persists seek medical advice / attention.
Skin contact	IF ON SKIN (or Hair): Take off all contaminated clothing. Rinse skin with water/shower. If irritation persists seek medical attention.
Ingestion	IF SWALLOWED; Immediately call POISON CENTER or GP. Rinse mouth out with water. Do NOT induce vomiting. Do not give milk or fatty oils.
4.2 Most important symptoms and effects, both acute and delayed:	May be fatal if swallowed and enters airways. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation

4.3 Indication of any immediate medical attention and special treatment need

None expected, see Section 4.1 for further information.

5. Firefighting Measures

5.1 Extinguishing Media:	
Suitable extinguishing media:	Carbon dioxide, dry chemical, foam.
Unsuitable extinguishing media:	

5.2 Special hazards arising from the substances or mixture:

Hazardous combustion products:	In case of fire, may be liberated: Carbon monoxide, unidentified organic compounds
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5.3 Advice for firefighters

In case of insufficient ventilation, wear suitable respiratory equipment.

6 Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures	Avoid inhalation. Avoid contact with skin and eyes. See protective measures under Section 7 and 8.
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6.1.1 For non-emergency personnel

Protective equipment:	
Emergency procedures:	

6.1.2 For Emergency responders	
6.2 Environmental precautions	Keep away from drains, surface and ground water, and soil.
6.3 Methods for cleaning up – 6.3.1 For containment:	Remove ignition sources. Provide adequate ventilation. Avoid excessive inhalation of vapours. Contain spillage immediately by use of sand or inert powder. Dispose of according to local regulations.
6.3.2 For cleaning up:	
6.3.3. Other information:	
6.4 Reference to other sections	Also refer to Sections 8 and 13

7. Handling and storage

7.1 Precautions for safe handling

Protective measures:

Prevent formation of aerosols.

Handle in a well-ventilated area, away from sources of ignition. **DO NOT SMOKE.**

Apply good manufacturing practice and industrial hygiene practices, ensuring proper workplace ventilation.

Observe good personal hygiene, and do not eat, drink or smoke whilst handling.

Measures to prevent fire:	Keep away from heat, sparks, open flames and hot surfaces. No smoking.
Measures to prevent aerosol and dust generation:	
Measures to protect the environment:	
Advice on general occupational hygiene:	
7.2 Conditions for safe storage, including any incompatibilities	
Technical measures and storage conditions:	
Packaging Materials:	
Requirements for storage and vessels:	Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge.
Storage Class: Further	

information on storage containers:	
7.3 Specific end use(s).	Flavours, Fragrances: Use in accordance with good manufacturing and industrial hygiene practices.
Recommendations:	
Industrial sector specific solutions:	

8. Exposure controls/Personal protection:	
8.1 Control parameters	Workplace Exposure Limits: Not applicable.
8.2 Exposure controls	
Engineering Measures	Ensure good ventilation of working area.
8.2.2 Personal Protection equipment	
8.2.2.1 Eye / face protection	Wear protective gloves/eye protection/face protection.
8.2.2.2 Skin Protection	
Hand protection	
Other skin protection	
8.2.2.3 Respiratory protection	Under normal conditions of use and where adequate ventilation is available to prevent build-up of excessive vapour, this material should not require special engineering controls. However, in conditions of high or prolonged use, or high temperature or other conditions which increase exposure, the following engineering controls can be used to minimise exposure to personnel: a) Increase ventilation of the area with local exhaust ventilation. b) Personnel can use an approved, appropriately fitted respirator with organic vapour cartridge or canisters and particulate filters. c) Use closed systems for transferring and processing this material. Also refer to Sections 2 and 7.
Ventilation	
8.2.2.4 Thermal hazards	
8.2.3 Environmental exposure controls	

9. Physical and chemical properties- C of A	
9.1 Information on basic physical and chemical properties	
Colour	Very pale straw colour.
Appearance	Liquid
Odour	Fresh, camphoraceous, spict
Odour Threshold	Not determined
Melting Point / freezing point	Not determined
Boiling point /Initial boiling point & boiling range	Not determined
Flammability (Solid, Gas)	Not determined
Lower and upper explosion limit	Product does not present an explosion hazard.

Flash point °C	57°C
Auto- ignition temperature	
Decomposition temperature	Not determined
pH	Not determined
Viscosity	Not determined
Solubility(ies)	Insoluble in water
Solubility in other Solvents	
Partition coefficient n-octanol/ water (log value)	Not determined
Vapour Pressure	Not determined
Relative Density	0.9170-0.9470
Vapour density	Not determined
Particle characteristics	
Explosive Properties	Not expected
Oxidising Properties	Not expected
9.2 Other information	None available
Specific gravity	
Optical rotation @ 20°C	
Refractive index @ 20°C	
Typical analysis of major components	

10. Stability and reactivity	
10.1 Reactivity	Presents no significant reactivity hazard, by itself or in contact with water.
10.2 Chemical Stability	Good stability under normal storage conditions.
10.3 Possibility of hazardous reactions:	Not expected under normal conditions of use.
10.4 Conditions to avoid:	Avoid extreme heat.
10.5 Incompatible Materials:	Avoid contact with strong acids, alkalis or oxidising agents.
10.6 Hazardous Decomposition Products	Not expected.

11. Toxicological information	
11.1 Information on hazard classes as defined in Regulation (EC) No 1272 /2008	
Information on Toxicological Effects	
Acute toxicity:	Based on available data the classification criteria are not met.
	Acute Toxicity Oral > 5000
	Acute Toxicity Deraml > 5000
	Acute Toxicity inhalation Not available
Skin corrosion /irritation:	Skin Corrosion/Irritation Category 2.
Seriously eye damage/irritation:	Eye Damage/Irritation Category 2.
Respiratory or skin sensitisation:	Sensitisation – Skin Category 1.

Germ cell mutagenicity:	Based on available data the classification criteria are not met.
Carcinogenicity:	Based on available data the classification criteria are not met.
Reproductive toxicity:	Based on available data the classification criteria are not met.
Summary of evaluation of the CMR properties:	
STOT- single exposure,	Based on available data the classification criteria are not met.
STOT-repeated exposure:	Based on available data the classification criteria are not met.
Aspiration hazard:	Based on available data the classification criteria are not met.
Information about Hazardous Ingredients in the Mixture	Not applicable. Refer to Sections 2 and 3 for additional information.

12. Ecological information	
12.1 Toxicity	Toxic to aquatic life with long lasting effects.
12.2 Persistency & degradability	Not available.
12.3 Bio accumulative potential	Not available.
12.4 Mobility in soil	Not available.
12.5 Results of PBT and vPvB Assessment	This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.
12.6 Endocrine disrupting properties	
12.7 Other adverse effects	Not available.

13. Disposal considerations	
13.1 Waste treatment methods	Dispose of in accordance with local regulations. Avoid disposing into drainage systems and into the environment. Empty containers should be taken to an approved waste handling site for recycling or disposal.
13.1.1. Product /Packaging disposal:	
13.1.2 Waste treatment-relevant information:	
13.1.3 Sewage disposal-relevant information:	
13.1.4 Other disposal-relevant recommendations:	Dispose of the contents / container in accordance with local / regional/ national / international regulations.

14. Transport information	
14.1 UN Number or ID number	UN1169
14.2 UN proper Shipping name	EXTRACTS, AROMATIC, LIQUID
14.3 Transport hazard class(es)	3

Sub Risk	-
14.4 Packing group	III
14.5 Environmental hazards	This is an environmentally hazardous substance.
14.6 Special precautions for user	None additional.
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

15 Regulatory information

15.1 Safety, health, and environmental regulations / legislation specific for the substance or mixture	None additional
15.2 Chemical Safety Assessment	A chemical safety assessment has not been carried out for this product.

16. Other information

- (i) **Indication of Changes: Revised Safety Data Sheet Format:** From March 2019. – Section 2 and 3 have changed places, additional points added under each section in line with Regulation EC) No 1272/2008 Version 4.2 March 2021'.

Concentration % Limits	EH C2	26.32%
	EH C3	2.63%
	SCI 2	33.90%
	EDI 2	24.69%
	EDI 2 A	23.81%
	SS 1	3.13%
	AH 1	90.91%
Total Fractional Values	EH C2	3.80
	EH C3	38.00
	SCI 2	2.95
	EDI 2	4.05
	EDI 2A	4.20
	SS 1	32.00
	AH 1	1.10

(ii) **Abbreviations and acronyms:**

DNEL: Derived No-Effect Level.

PNEC: Predicted No- Effect Concentration.

ADR: European agreement concerning the international carriage of dangerous goods by road.

RID: Regulations concerning the International carriage of Dangerous goods by rail.

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the 'International Civil Aviation Organisation" (ICAO)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Maritime Dangerous Goods.
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
WGK: Water Hazard Class.
LC50: Lethal concentration, 50 percent
LD50: Lethal Dose, 50 percent
PBT: Persistent, Bio accumulative and Toxic
vPvB: Very Persistent and very Bio accumulative
Flam. Liq: Flammable Liquid
AT: Acute Toxicity – O = Oral / D = Dermal / I = Inhalation
Asp: Aspiration Hazard
Skin Corr/ Irrit: Skin Corrosion / Irritation
Skin Sens: Skin Sensation
Eye Dam/ Irrit: Eye damage / Irritation
Muta: Mutagenic
Carc: Carcinogenic
Resp: Respiration Sensitive
Repro: Reproductive Sensitive
EH A: Environmental Hazard Aquatic Acute
EH C: Environmental Hazard Aquatic Chronic
STOT: Specific Target Organ Toxicity – SE – Single Exposure
STOT: Specific Target Organ Toxicity – RE – Repeated Exposure

(iii) **Key Literature references and sources of date.**

(iv) **Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 (CLP):**

Classification according to Regulation (EC) 1272/2008(CLP)	Classification procedure
(v) Relevant H-statements (number and full text):	
(vi) Training advice:	
(vii) Further information:	
Shelf life	Minimum 12 months when stored in the advised conditions.

QC requirements

In line with general product specification. Always satisfy suitability for specific application. Retest after 6 months.

Disclaimer:

The data provided in this material safety data sheet is meant to represent typical data/analysis for this product and is correct to the best of our knowledge. The data was obtained from current and reliable sources, but is date supplied without warranty, expressed, or implied, regarding its correctness or accuracy. It is the user's responsibility to determine safe conditions for the use of this product and to assume liability for loss, injury, damage, or expense arising from improper use of this product. The information provided does not constitute a contract to supply to any specification or for any given application and buyers should seek to verify their requirements and product use.