

Material Safety Data Sheet: Cardamom Essential Oil

01. IDENTIFICATION OF THE SUBSTANCE/PREPARATION & THE COMPANY/UNDERTAKING

1.1 Product Identifier					
Product Name		Cardamom Essential Oil			
Biological Definition		Elettaria Cardamomum Seed Oil is the volatile oil obtained from the dried ripe seeds of <i>Elettaria cardamomum</i> , <i>Zingiberaceae</i> .			
INCI Name		Elettaria Cardamomum Seed Oil			
Synonyms & Trade Names		-			
CAS-No	8000-66-6 / 85940-32-5	EC No.	- / 288-922-1	EINECS No.	- / 288-922-1
1.2 Relative identified uses of the substance or mixture and uses advised against					
No additional data available.					
1.3 Details of the supplier of the safety data sheet					
NTM UK LTD, 69 Bethel Street, Norwich, Norfolk, United Kingdom NR2 1NR					
1.4 Emergency Tel. No.		+44(0)1603 610883			

02. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

The Full Text for all Hazard Statements is displayed in Section 16.

Classification (EC 1272/2008)

Physical and Chemical Hazards: Flammable Liquid, Hazard Category 3 H226, Flammable liquid and vapour.

Human health: Skin Corrosion / Irritation Category 2 H315, Causes skin irritation; Eye Damage / Irritation Category 2 H319, Causes serious eye irritation; Sensitization - Skin Category 1 H317, May cause an allergic skin reaction; Aspiration Hazard Category 1 H304, May be fatal if swallowed and enters airways.

Environment: Hazardous to the Aquatic Environment - Long-term Hazard Category 2; H411, Toxic to aquatic life with long lasting effects.

2.2 Label Elements

Label in accordance with (EC) No 1272/2008

GHS02



GHS07



GHS08



GHS09



Signal Word

Danger.

Contains

-

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, 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.
 P301/310, IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 P303/361/353, IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
 P305/351/338, IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P331, Do not induce vomiting.
 P333/313, If skin irritation or rash occurs: Get medical advice/attention.
 P337/313, If eye irritation persists: Get medical advice/attention.
 P362, Take off contaminated clothing and wash before reuse.
 P370/378, In case of fire: Use carbon dioxide, dry chemical, foam for extinction.
 P391, Collect spillage.
 P403/235, 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

None

2.3 Other Hazards

PBT or vPvB according to Annex XIII	No additional data available.
Adverse physio-chemical properties	No additional data available.
Adverse effects on human health	No additional data available.

03. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures	
44.0% alpha-Terpineol acetate	CAS-No: 80-26-2 EC No: 201-265-7 Classification (EC 1272/2008):
32.0% Eucalyptol	CAS-No: 470-82-6 EC No: 207-431-5 Classification (EC 1272/2008) FL 3-SS 1B;H226-H317,-
8.0% Linalyl acetate	CAS-No: 115-95-7 EC No: 204-116-4 Classification (EC 1272/2008) SCI 2-EDI 2;H315-H319,-
5.0% Linalool	CAS-No: 78-70-6 EC No: 201-134-4 Classification (EC 1272/2008) SCI 2-EDI 2-SS 1B;H315- H317-H319,-
3.5% d-Limonene	CAS-No: 5989-27-5 EC No: 227-813-5 Classification (EC 1272/2008) FL 3-SCI 2-SS 1B-AH 1-EH A1-EH C1;H226-H304- H315-H317-H410,-
3.0% alpha-Terpineol	CAS-No: 98-55-5 EC No: 202-680-6 Classification (EC 1272/2008) SCI 2-EDI 2;H315-H319,-
3.0% Myrcene	CAS-No: 123-35-3 EC No: 24-622-5 Classification (EC 1272/2008) FL 3-SCI 2-EDI 2-AH 1; H226-H304-H315-H319,-
2.5% alpha-Pinene	CAS-No: 80-56-8 EC No: 201-291-9 Classification (EC 1272/2008) FL 3-SCI 2-SS 1B-AH 1-EH A1-EH C1;H226-H304- H315-H317-H410,-
2.0% Geraniol	CAS-No: 106-24-1 EC No: 203-377-1 Classification (EC 1272/2008) SCI 2-EDI 1-SS 1;H315- H317-H318,-
1.5% Citral	CAS-No: 5392-40-5 EC No: 226-394-6 Classification (EC 1272/2008) SCI 2-EDI 2-SS 1B;H315- H317-H319,-
1.5% Nerolidol	CAS-No: 7212-44-4 EC No: 230-597-5 Classification (EC 1272/2008) EDI 2-EH A1-EH C1;H319- H410-
1.0% Terpinolene	CAS-No: 586-62-9 EC No: 209-578-0 Classification (EC 1272/2008) SS 1B-AH 1-EH A1-EH C1; H304-H317-H410,-
1.0% beta-Pinene	CAS-No: 127-91-3 EC No: 204-872-5 Classification (EC 1272/2008) FL 3-SCI 2-SS 1B-AH 1-EH A1-EH C1;H226-H304- H315-H317-H410,-

04. FIRST AID MEASURES

4.1	Description of first aid measures
Inhalation	Move the exposed person to fresh air at once. Get medical attention.
Ingestion	Immediately call a POISON CENTER or doctor/physician.
Skin	Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
4.2	Most important symptoms and effects, both acute and delayed May be fatal if swallowed and enters airways.
4.3	Indication of any immediate medical attention and special treatment needed None expected, see Section 4.1 for further information.

05. FIRE-FIGHTING MEASURES

5.1	Extinguishing Media Do not use a direct stream of water to extinguish. Use: Powder. Carbon dioxide (CO2). Foam
5.2	Special hazards arising from the product In case of fire, may be liberated: Carbon monoxide, Unidentified organic compounds.

5.3 Advice for firefighters

In case of insufficient ventilation, wear suitable respiratory equipment.

06. 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.
--

6.2 Environmental Precautions

Do not discharge into drains, water courses or onto the ground.

6.3 Methods and material for containment and cleaning up.
--

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.

6.4 Reference to other sections
--

See sections 8 and 13.

07. HANDLING AND STORAGE

7.1 Precautions for safe handling
--

Keep away from heat, sparks, open flames and hot surfaces. - No smoking.
--


7.2 Conditions for safe storage, including any incompatibilities

Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

7.3 Specific end use(s)

Flavours, Fragrances: Use in accordance with good manufacturing and industrial hygiene practices.

08. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters	
Workplace exposure limits: Not Applicable.	
8.2 Exposure controls	
Protective Equipment	
	
Process Conditions	Provide eyewash station.
Engineering Measures	Provide adequate ventilation.
Respiratory Equipment	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.
Hand Protection	Use suitable protective gloves if risk of skin contact.
Eye Protection	Wear protective gloves/eye protection/face protection.
Other Protection	Wear appropriate clothing to prevent any possibility of skin contact.
Hygiene Measures	Good personal hygiene practices are always advisable, especially when working with chemicals / oils.
Personal Protection	Use personal protection according to Directive 89/686/EEC.
Skin Protection	Wear apron or protective clothing in case of splashes.
Environmental Exposure Controls	Avoid discharging into drainage water. Only eliminate by authorised companies.

09. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties	
Appearance	Mobile liquid colourless to pale yellow.
Colour	Colourless to pale yellow.
Odour	Characteristic.
Relative Density	0.915 - 0.950 @ 20°C
Flash Point (°C)	57.0
Refractive Index	1.460 - 1.470 @ 20°C
Melting Point (°C)	No additional data available.
Boiling Point (°C)	No additional data available.
Vapour Pressure	No additional data available.
Solubility in Water @20°C	Insoluble
Auto-ignition temperature (°C)	No additional data available.

9.2 Other information	
No additional data available.	

10. STABILITY AND REACTIVITY

10.1 Reactivity	No additional data available.
10.2 Chemical stability	Stable under the recommended handling and storage conditions.
10.3 Possible hazardous reactions	No additional data available.
10.4 Conditions to Avoid	Avoid heat, sparks and open flames.
10.5 Incompatible materials	Materials To Avoid: Strong acids, alkali or oxidising agents.
10.6 Hazardous Decomposition Products	In case of fire, dangerous decomposition products can be generated, such as carbon monoxide and dioxide and nitrogen fumes and oxides.

11. TOXOLOGICAL INFORMATION

11.1 Information on toxicological effects	
Acute Toxicity	There is no data available on this product. It must be considered and handled and should be dealt with the highest possible caution.
Skin corrosion / irritation	No additional data available.
Serious eye damage / irritation	No additional data available.
Respiratory or skin sensitisation	No additional data available.
Germ Cell Mutagenicity	No additional data available.
Carcinogenicity	No additional data available.
Reproductive toxicity	No additional data available.
STOT-single exposure	No additional data available.
STOT-repeated exposure	No additional data available.
Photo-toxicity	No additional data available.
Other Information	No additional data available.



12. ECOLOGICAL INFORMATION

12.1 Toxicity	No additional data available.
12.2 Persistence & degradability	Degradability: No additional data available.
12.3 Bioaccumulation Potential	Bioaccumulative potential: No data available on bioaccumulation.
12.4 Mobility in soil	No additional data available.
12.5 Results of PBT and vPvB Assessment	No additional data available.
12.6 Other adverse effects	No additional data available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Dispose of in compliance with all local and national regulations.

14. TRANSPORT INFORMATION

14.1 UN number	
UN No. Road	None.
UN No. SEA	None.
UN No. AIR	None.
14.2 UN proper shipping name	
None	
14.3 Transport hazard class(es)	
ADR/RID/ADN Class:	9 Miscellaneous dangerous substances and articles.
ICAO Class/Division:	9
IMDG Class:	9
Transport Labels	
	
14.4 Packing group	
IMDG Packing group	III
ICAO Packing group	III
14.5 Environmental hazards	
Environmentally Hazardous Substance/Marine Pollutant	
	
14.6 Special precautions for user	
EMS F-A-S-F	
Hazard No. (ADR) 9	
Hazard No. (ADR) 90 Environmentally hazardous substance; miscellaneous dangerous substances.	
Tunnel Restriction Code (E)	
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code	
No additional data available.	

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture	
<p>Statutory Instruments The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). Guidance Notes Workplace Exposure Limits EH40. CHIP for everyone HSG(108). EU Legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.</p>	
15.2	Chemical safety assessment
	No additional information available.

16. OTHER INFORMATION

Hazard and/or Precautionary Statements in Full	<p>H316 Causes mild skin irritation. H315 Causes skin irritation. H226 Flammable liquid and vapour. H302 Harmful if swallowed. H412 Harmful to aquatic life with long lasting effects. H402 Harmful to aquatic life. H304 May be fatal if swallowed and enters airways. H303 May be harmful if swallowed. H317 May cause an allergic skin reaction. H351 Suspected of causing cancer. H341 Suspected of causing genetic defects. H411 Toxic to aquatic life with long lasting effects. H410 Very toxic to aquatic life with long lasting effects. H400nVery toxic to aquatic life.</p>
Other Information	None.
Revision Date	20/10/2015
Reason for revision	Updated New Format SDS.
Rev No/Repl, SDS Generated	02

DISCLAIMER: This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.