MATERIAL SAFETY DATA SHEET

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

| 1.1 | Proc | duct Identifier | | | | |
|----------|---|---------------------|---|----------------------|-------------------|-----------------------|
| Product | t Nar | ne | Galangal | Essential Oil | | |
| Biologic | Biological Definition | | alpinia officinarum Oil is an essential oil distilled from the roots of Alpinia SPP | | | |
| INCI Na | ame | | alpinia officinarum | | | |
| Synony | ms 8 | & Trade Names | Galangal Oil, Lesser Galangal Oil | | | |
| CAS-No | CAS-No 8024-40-6 | | EC No. | 283- 399-6 | EINECS No. | 283- 399-6 |
| 1.2 | 1.2 Relative identified uses of the substance or mixture and uses advised against | | | ises advised against | | |
| | No a | additional data ava | ailable. | | | |
| 1.3 | Det | ails of the suppli | er of the s | safety data s | heet | |
| | AE | COSMETICS LTD | , 69 Bethe | el Street, Norv | wich, Norfolk, Ur | nited Kingdom NR2 1NR |
| 1.4 | Em | ergency Tel. No. | | +44(0)160 | 03 610883 | |

02. HAZARDS IDENTIFICATION

| 2.1 | .1 Classification of the substance or mixture | | |
|--|--|--|--|
| | The Full Text for all Hazard Statements is displayed in Section 16. | | |
| Class | sification (EC 1272/2008) | | |
| | Physical and Chemical Hazards: Not classified. | | |
| | Human health: Skin Irrit. 2 - H315;Skin Sens. 1 - H317; Asp. Tox. 1 H304 | | |
| | Environment: Aquatic Chronic 3 - H411 | | |
| 2.2 | Label Elements | | |
| Labe | el in accordance with (EC) No 1272/2008 | | |
| | GHS08 GHS07 GHS09 | | |
| | | | |
| Signa | al Word Danger | | |
| Cont | ains Farnesene, Pin-2(3)-Ene (Alpha-Pinenes), Bisabolene | | |
| Haza | Hazard Statements | | |
| H315 Causes skin irritation. H304 May be fatal if swallowed and enters airways. H411 Toxic to aquatic life with long lasting effects. H317 May cause an allergic skin reaction. | | | |

Precautionary Statements

P273 Avoid release to the environment.

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

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

P302+P352 IF ON SKIN: Wash with plenty of water.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P501 Dispose of contents/container in accordance with national regulations.

Supplementary Precautionary Statements

P261 Avoid breathing vapour/spray.

P264 Wash contaminated skin thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P321 Specific treatment (see medical advice on this label).

P331 Do NOT induce vomiting.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

P405 Store locked up.

CONTAINS: Farnesene, Bisabolene, Pin-2(3)-Ene (Alpha-Pinenes), Eucalyptol,

Geranyl Acetate, Pin-2(10)-Ene (Beta-Pinenes), Limonene, P-Mentha1,4(8)-Diene (Terpinolene)

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

| 2 | Mixtures |
|---|---|
| | 10-30% FARNESENE CAS number: 18794-84-8 EC number: 242-582-0 |
| | Classification: Asp. Tox. 1 - H304 |
| | 10-30% BISABOLENE CAS number: 495-62-5 EC number: 207-805-8 |
| | Classification: Skin Irrit. 2 - H315: Skin Sens. 1B - H317: Asp. Tox. 1 - H304 |
| | 10-30% PIN-2(3)-ENE (ALPHA-PINENES) CAS number: 80-56-8 EC number: 201-291-9 |
| | M factor (Acute): 1M factor (Chronic): 1 |
| | Classification: Flam. Liq. 3 - H226; Skin Irrit. 2 - H315; Skin Sens. 1B - H317; Asp. Tox. 1 - H304 |
| | Aquatic Acute 1 - H400; Aquatic Chronic 1 - H410 |
| | 1.0 -5.0% Linalool |
| | CAS-No.: 78-70-6 EC No.: 201-134-4 |
| | Classification (EC 1272/2008) Acute Tox. 5 - H303, Skin Irrit. 2 - H315, Aquatic Acute 3 - H402 |
| | 5-10% EUCALYPTOL CAS number: 470-82-6 EC number: 207-431-5 |
| | Classification: Flam. Liq. 3 - H226; Skin Sens. 1B - H317 |
| | 5-10% GERANYL ACETATE CAS number: 105-87-3; EC number: 203-341-5 |
| | Classification: Skin Irrit. 2 - H315; Skin Sens. 1 - H317; Aquatic Chronic 2 - H411 |
| | 1-5% CARYOPHYLLENE OXIDE CAS number: 1139-30-6 EC number: 214-519-7 |
| | Classification: Aquatic Chronic 2 - H411 |
| | 1-5% LIMONENE CAS number: 138-86-3 EC number: 205-341-0;M factor (Acute): 1; M factor |
| | (Chronic): 1 |
| | Classification: Flam. Liq. 3 - H226; Skin Irrit. 2 - H315; Skin Sens. 1 - H317 |
| | Asp. Tox. 1 - H304; Aquatic Acute 1 - H400; Aquatic Chronic 1 - H410 |
| | 1-5% CITRONELLYL ACETATE CAS number: 150-84-5 EC number: 205-775-0 |
| | Classification: Skin Irrit. 2 - H315; Aquatic Chronic 2 - H411 |

<1% CAMPHENE CAS number: 79-92-5 EC number: 201-234-8 M factor (Acute): 1 Classification: Flam. Liq. 3 - H226 Eye Irrit. 2 - H319 Asp. Tox. 1 - H304 Aquatic Acute 1 - H400; Aquatic Chronic 2 - H411

<1% p-MENTHA-1,4(8)-DIENE (TERPINOLENE) CAS number: 586-62-9 EC number: 209-578-0 M factor (Chronic): 1

Classification: Skin Sens. 1 - H317; Asp. Tox. 1 - H304; Aquatic Chronic 1 - H410

04. FIRST AID MEASURES

| 4.1 | Description of first aid measures |
|--------------|--|
| Inhalation | Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues. |
| Ingestion | Ingestion may cause nausea and vomiting. Seek medical attention if irritation or symptoms persist. Do not induce vomiting. |
| Skin Contact | Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues. |
| Eye Contact | Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention. |
| 4.2 | Most important symptoms and effects, both acute and delayed |
| | No additional data available. |
| 4.3 | Indication of any immediate medical attention and special treatment needed |
| | No additional data available. |

05. FIRE-FIGHTING MEASURES

| 5.1 | Extinguishing Media |
|-----|---|
| | Do not use a direct stream of water to extinguish. Use: Powder. Carbon dioxide (CO2). |
| 5.2 | Special hazards arising from the product |
| | Specific hazards: When heated and in case of fire, toxic vapours/gases may be formed. |
| 5.3 | Advice for firefighters |
| | Protective equipment for fire-fighters: |
| | Wear Self-contained breathing apparatus. Wear chemical protective clothing. |

06. ACCIDENTAL RELEASE MEASURES

| 6.1 | Personal precautions, protective equipment and emergency procedures |
|-----|---|
| | Wear protective clothing as described in Section 8 of this safety data sheet. |
| 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. |
| | Absorb with inert, non-combustible, inorganic absorbent material, sweep up and remove to an approved disposal container. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. |
| 6.4 | Reference to other sections |
| | No additional data available. |

07. HANDLING AND STORAGE

| 7.1 | Precautions for safe handling |
|-----|---|
| | Avoid spilling, skin and eye contact. Adopt best manual handling considerations when handling, |
| | carrying and dispensing. |
| 7.2 | Conditions for safe storage, including any incompatibilities |
| | Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original |
| | container. |

| | | Keep away from heat, sparks and open flame |
|-------------------------|--|--|
| 7.3 Specific end use(s) | | Specific end use(s) |
| | | No additional data available |

08. EXPOSURE CONTROLS/PERSONAL PROTECTION

| 8.1 | Control parameters | |
|--------|----------------------------|--|
| | Linalool (CAS: 78-70-6) | |
| | Ingredient Comments: | No exposure limits noted for ingredient. |
| 8.2 | Exposure controls | |
| Prote | ctive Equipment | |
| | | |
| Proce | ess Conditions | Safety shower and eye bath. |
| Engin | eering Measures | Provide adequate ventilation. |
| | | Respiratory equipment. |
| | | Self-contained breathing apparatus. |
| Respi | iratory Equipment | Protection not required if good ventilation is maintained. Use |
| - | | inhalation protection in poorly ventilated areas. |
| Hand | Protection | Use suitable protective gloves if risk of skin contact. |
| Eye P | Protection | Wear approved safety goggles. |
| Other | Protection | Wear rubber apron. |
| Hygie | ene Measures | Remove contaminated clothing and wash the skin thoroughly |
| | | with soap and water after work. |
| Perso | onal Protection | Use personal protection according to Directive 89/686/EEC. |
| Skin F | Protection | Wear apron or protective clothing in case of splashes. |
| Enviro | onmental 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 | Liquid | |
| Colour | Yellow | |
| Odour | Chracteristic | |
| Relative Density @ 20°C | 0.940- 0.960 | |
| Flash Point (°C) | >58 | |
| Refractive Index @ 20°C | 1.49210 - 1.4935 @ 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 in water. | |
| Auto-ignition temperature (°C) | No additional data available. | |

9.2 Other information

No additional data available.

10. STABILITY AND REACTIVITY

| 10. 31 | ADILITY 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

| Skin Contact | Causes skin irritation. May cause an allergic skin reaction. |
|-----------------------------------|--|
| Ingestion | May be fatal if swallowed and enters airways. |
| Acute Toxicity | - ATE ORAL (MG/KG): 111,333.33 |
| 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 | |
|------|---|--|
| | Toxic to aquatic life with long lasting effects. | |
| 12.2 | Persistence & degradability | |
| | The product is expected to be biodegradable | |
| 12.3 | Bioaccumulation Potential | |
| | The product does not contain any substances expected to be bioaccumulating. | |
| 12.4 | Mobility in soil | |
| | The product is insoluble in water | |
| 12.5 | Results of PBT and vPvB Assessment | |
| | This product does not contain any substances classified as PBT or vPvB. | |
| 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

| L L 14.2 L 14.3 T A I I I I I I I I I I I I I I I I I I | JN number JN No. Road JN No. SEA JN No. AIR JN proper shipping name Environmentally Hazardou Transport hazard class(es) ADR/RID/ADN Class: CAO Class/Division: MDG Class: Transport Labels | 3082. 3082 3082 s Substance, Liquid, N.O.S. 9 Miscellaneous dangerous substances and articles. 9 9 |
|---|--|--|
| 14.2 U 14.3 T 14.3 I 14.3 I | JN No. SEA JN No. AIR JN proper shipping name Invironmentally Hazardou Fransport hazard class(es) ADR/RID/ADN Class: CAO Class/Division: MDG Class: | 3082 3082 Is Substance, Liquid, N.O.S. 9 Miscellaneous dangerous substances and articles. 9 |
| L 14.2 L E 14.3 T A I I I I I I I I I I I I I I I I I I | JN No. AIR JN proper shipping name Invironmentally Hazardou Transport hazard class(es) ADR/RID/ADN Class: CAO Class/Division: MDG Class: | 3082 Is Substance, Liquid, N.O.S. 9 Miscellaneous dangerous substances and articles. 9 |
| 14.2 U E 14.3 T // 0 | JN proper shipping name Environmentally Hazardou Fransport hazard class(es) ADR/RID/ADN Class: CAO Class/Division: MDG Class: | s Substance, Liquid, N.O.S. 9 Miscellaneous dangerous substances and articles. 9 |
| E 14.3 T / / 0 | Environmentally Hazardou Transport hazard class(es) ADR/RID/ADN Class: CAO Class/Division: MDG Class: | 9 Miscellaneous dangerous substances and articles.9 |
| 14.3 T A I(| Transport hazard class(es) ADR/RID/ADN Class: CAO Class/Division: MDG Class: | 9 Miscellaneous dangerous substances and articles.9 |
| <i>۲</i> ۱(| ADR/RID/ADN Class: CAO Class/Division: MDG Class: | 9 Miscellaneous dangerous substances and articles.9 |
| I | MDG Class: | 9 |
| I | MDG Class: | 9 |
| T | Fransport Labels | |
| | MISCELLANEOUS DANGEROUS GOODS 9 | |
| | V | |
| 14.4 F | Packing group | |
| I | MDG Packing group | |
| 10 | CAO Packing group | |
| 14.5 E | Environmental hazards | |
| E | Environmentally Hazardou | is Substance/Marine Pollutant |
| 14.6 S | Special precautions for user | |
| | EMS F-A-S-F | |
| F | Hazard No. (ADR) 9 | |
| F | Hazard No. (ADR) 90 Environmentally hazardous substance; miscellaneous dangerous | |
| S | substances. | |
| Т | Tunnel Restriction Code (E) | |
| 14.7 T | Transport in bulk according to Annex II of MARPOL73/78 and the IBC code | |
| Ν | No additional data available. | |

15. REGULATORY INFORMATION

| | mixture |
|------|--|
| 15.1 | Safety, health and environmental regulations/legislation specific for the substance or |

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.

| 15.2 | .2 Chemical safety assessment | |
|------|--------------------------------------|--|
| | No additional information available. | |

16. OTHER INFORMATION

| Hazard and/or Precautionary Statements in Full | 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. H319 Causes serious eye irritation. 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. |
|--|--|
| Other Information | None. |

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.