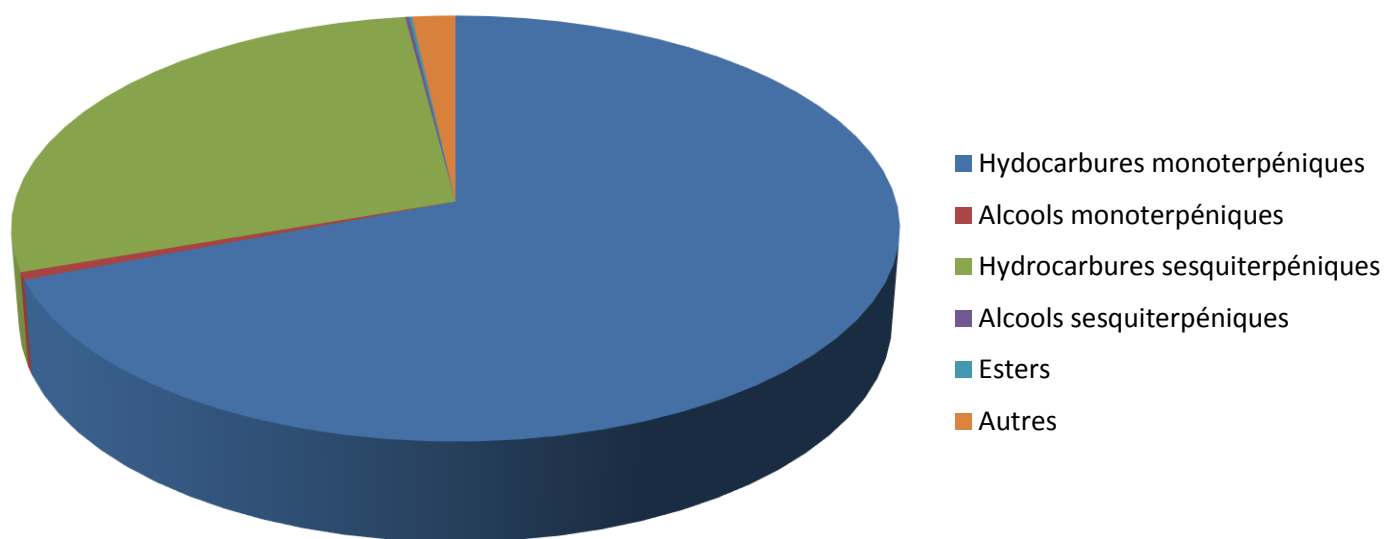


|  |  |   |              |
|--|--|---|--------------|
| <br>JE INTERNATIONAL | <b>ENREGISTREMENT DES BULLETINS<br/>ANALYTIQUES : CHROMATOGRAPHIE<br/>ESSENTIAL OIL CHROMATOGRAPHY SHEET<br/>RECORDS</b> | FORM-LAB005-B   | Page 1 sur 3 |
|  |  | Date d'entrée en vigueur / taking effect : 10/06/2011 |              |

|  |   |   |
|--|---|---|
| Date   | : | 14/04/2016                                    |
| Référence produit / Product reference                                      | : | FLE122  |
| Huile essentielle de / Essential oil of                                    | : | Poivre noir / Black pepper                    |
| Numéro de lot / Lot Number   | : | B210316LK                                     |
| Densité à 20°C (g/cm <sup>3</sup> ) / Density to 20°C (g/cm <sup>3</sup> ) | : | 0.870   |
| Indice de réfraction / Refractive index                                    | : | 1.47929                                       |
| Pouvoir rotatoire à 20°C / Optical rotation to 20°C                        | : | -26.96°                                       |
| Mode de culture / Culture mode   | : | Cultivé / Cultivated                          |
| Pays / Country   | : | SRI LANKA                                     |
| Date de production / Production date                                       | : | 03/2016                                       |
| D.L.U. / Shelf life  | : | 04/2021                                       |
| Mode d'extraction / Extraction mode  | : | Distillation à la vapeur / Steam distillation |
| % Bio / % Organic  | : | 100% Bio / 100% Organic                       |
| Nom Latin / Latin Name   | : | Piper nigrum                                  |
| Parties utilisées / Used Parts   | : | Baies / Berry                                 |



| Molécule                  | %      |
|---------------------------|--------|
| ALPHA-THUJENE             | 0.846  |
| ALPHA-PINENE              | 12.615 |
| CAMPHENE                  | 0.353  |
| SABINENE                  | 16.890 |
| BETA-PINENE               | 11.047 |
| MYRCENE                   | 1.015  |
| ALPHA-PHELLANDRENE        | 0.435  |
| DELTA-3-CARENE            | 8.794  |
| ALPHA-TERPINENE           | 0.096  |
| PARA-CYMENE               | 0.645  |
| <b>LIMONENE</b>           | 15.045 |
| BETA-PHELLANDRENE         | 0.759  |
| EUCALYPTOL                | 0.195  |
| (E)-BETA-OCIMENE          | 0.087  |
| GAMMA-TERPINENE           | 0.172  |
| TERPINOLENE               | 0.196  |
| <b>LINALOL</b>            | 0.145  |
| TERPINENE-4-OL            | 0.353  |
| ALPHA-TERPINEOL           | 0.075  |
| DELTA-ELEMENE             | 0.646  |
| ACETATE D'ALPHA-TERPENYLE | 0.121  |

| Molécule               | %             |
|------------------------|---------------|
| BETA-ELEMENE ISOMERE   | 0.058         |
| ALPHA-COPAENE          | 1.467         |
| BETA-ELEMENE           | 0.092         |
| BETA-CARYOPHYLLENE     | 23.600        |
| GAMMA-ELEMENE          | 0.230         |
| ALPHA-GUAIENE          | 0.052         |
| ALPHA-HUMULENE         | 0.690         |
| GERMACRENE-D           | 0.123         |
| BETA-SELINENE          | 0.070         |
| BICYCLOGERMACRENE      | 0.098         |
| ALPHA-MUUROLENE        | 0.185         |
| BETA-BISABOLENE        | 0.305         |
| DELTA-CADINENE         | 0.569         |
| CIS-CALAMENENE         | 0.079         |
| (E)-NEROLIDOL          | 0.058         |
| SPATHULENOL            | 0.094         |
| OXYDE DE CARYOPHYLLENE | 0.957         |
| MW 222                 | 0.159         |
| <b>Total</b>           | <b>99.416</b> |

\* = Substance(s) allergène(s) / allergen(s)  
 \*\* = Substance(s) classée(s) CMR / Substance(s) classified as CMR

