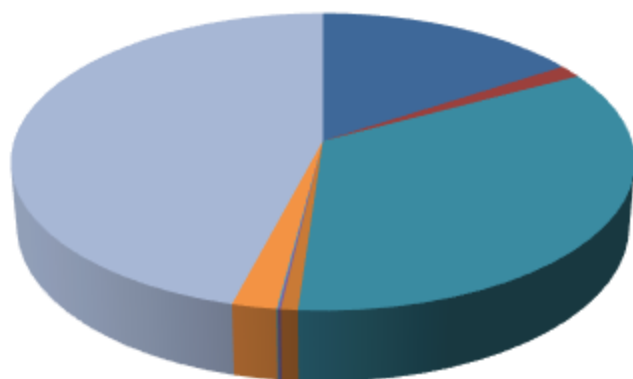


 <b>JE INTERNATIONAL</b>	<b>ENREGISTREMENT DES BULLETINS ANALYTIQUES : CHROMATOGRAPHIE ESSENTIAL OIL CHROMATOGRAPHY SHEET RECORDS</b>	<b>FORM-LAB005-B</b>	<b>Page 1 sur 6</b>
		<b>Date d'entrée en vigueur / taking effect : 10/06/2011</b>	

Date : 23/12/2013  
 Référence produit / Product reference : FLE115  
 Huile essentielle de / Essential oil of : Gingembre / Ginger  
 Numéro de lot / Lot Number : P021213MG  
 Densité à 20°C (g/cm<sup>3</sup>) / Density to 20°C (g/cm<sup>3</sup>) : 0.880  
 Indice de réfraction / Refractive index : 1.488  
 Pouvoir rotatoire à 20°C / Optical rotation to 20°C : -22.5  
 Mode de culture / Culture mode : Cultivé / Cultivated  
 Pays / Country : MADAGASCAR  
 Date de production / Production date : 06/2013  
 D.L.U. / Shelf life : 07/2018  
 Mode d'extraction / Extraction mode : Distillation à la vapeur / Steam distillation  
 % Bio / % Organic : 100% Bio / 100% Organic  
 Nom Latin / Latin Name : Zingiber Officinalis  
 Parties utilisées / Used Parts : Rhizome / Rhizome



- Hydrocarbures monoterpéniques
- alcools monoterpéniques
- cétones monoterpéniques
- aldéhyde monoterpéniques
- hydrocarbures sesquiterpéniques
- alcools sesquiterpéniques



Molécule	%
TRICYCLENE	0.220
ALPHA-PINENE	3.350
CAMPHENE	10.440
BETA-PINENE	0.42
SABINENE	0.080
DELTA-3-CARENE	0.050
BETA-MYRCENE	1.19
ALPHA-PHELLANDRENE	0.3
2-HEPTANONE	0.05
<b>LIMONENE *</b>	1.65
BETA-PHELLANDRENE + 1,8-CINEOLE	8.320
PARA-CYMENE	0.080
TERPINOLENE	0.25
4,8-DIMETHYL-1,3,7-NONATRIENE	0.060
2-HEPTANOL	0.050
6-METHYL-5-HEPTEN-2-ONE	0.270
2-NONANONE	0.080
COMPOSE Mw=150	0.070
ALPHA-CUBEBENE	0.060
DELTA-ELEMENE	0.08
CITRONELLAL	0.060

Molécule	%
CYCLOSATIVENE	0.250
ALPHA-COPAENE	0.360
DECANAL	0.360
2-NONANOL	0.070
CAMPHRE	0.080
<b>LINALOL *</b>	0.340
BERGAMOTENE ISOMERE	0.210
ALPHA-SANTALENE	0.050
FENCHOL + EPSILON-CADINENE	0.050
ACETATE DE BORNYLE	0.060
ALPHA-TRANS-BERGAMOTENE	0.100
BETA-ELEMENE	0.610
2-UNDECANONE	0.180
BETA-CUBEBENE + HYDRATE DE CAMPHENE	0.090
CETONE ALIPHATIQUE Mw = 166 + TERPINENE-4-OL	0.180
BETA-CARYOPHYLLENE	0.080
AROMADENDRENE + GURJUNENE ISOMERE	0.08
FARNESENE ISOMERE + GERMACRENE A	0.250
1-NONANOL	0.120
ALLO-AROMADENDRENE	0.340
(E)-BETA-FARNESENE + TRANS-PINOCARVEOL	0.640

Molécule	%
ISOBORNEOL	0.060
ALPHA-HUMULENE	0.060
GAMMA-SELINENE	0.13
<b>NERAL *</b>	1.65
(Z)-BETA-FARNESENE	0.070
GAMMA-CURCUMENE	0.1
GAMMA-MUUROLENE	0.160
ALPHA-TERPINEOL	0.48
ACETATE DE TERPENYLE	0.070
BORNEOL	1.050
SESQUITERPENE	0.100
CHAMIGRENE ISOMERE	0.160
GERMACRENE D	1.300
ALPHA-ZINGIBERENE	25.410
ALPHA-MUUROLENE	1.210
BETA-BISABOLENE + BETA-SELINENE	5.050
GERANIAL + ALPHA-SELINENE	2.820
BETA-CURCUMENE	1.150
(E,E)-ALPHA-FARNESENE	4.170
FARNESENE ISOMERE	0.320
DELTA-CADINENE	0.450

Molécule	%
GAMMA-CADINENE	0.260
ALPHA-CURCUMENE	3.040
NEROL	0.280
CETONE ALIPHATIQUE	0.020
<b>GERANIOL *</b>	0.910
CALAMENENE + GERMACRENE B	0.200
EPI-CUBENOL	0.060
CUBENOL	0.060
ZINGIBERENOL ISOMERE	0.160
SESQUITERPENE OXYGENE	0.090
(E)-NEROLIDOL	0.480
ELEMOL	0.190
SESQUIPELLANDROL ISOMERE	0.25
HYDRATE DE SESQUISABINENE	0.550
10-EPI-GAMMA-EUDESOL	0.110
SESQUITERPENOL Mw = 222	0.05
SESQUITERPENOL Mw = 222	0.070
ZINGIBERENOL ISOMERE	0.070
COMPOSE AROMATIQUE	0.060
GAMMA-EUDESOL	0.110
ZINGIBERENOL	0.340



<b>Molécule</b>	<b>%</b>
SESQUITERPENOL + METHYLISOEUGENOL	0.120
ALPHA-MUUROLOL	0.050
ALPHA-EUDES MOL	0.090
ALPHA-CADINOL	0.110
BETA-EUDES MOL	0.290
MAALIOL	0.050
GERANYLGERANIADIENE ISOMERE	0.210
EPOXYDE SESQUITERPENIQUE	0.330
ZINGIBERENOL ISOMERE	0.330
GERANYL-PARA-CYMENE	0.050
ZINGIBEROL	0.250
ZINGIBERONE	0.100
<b>Total</b>	<b>86.940</b>

\* = Substance(s) allergène(s) / allergen(s)

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

