

Sample Information

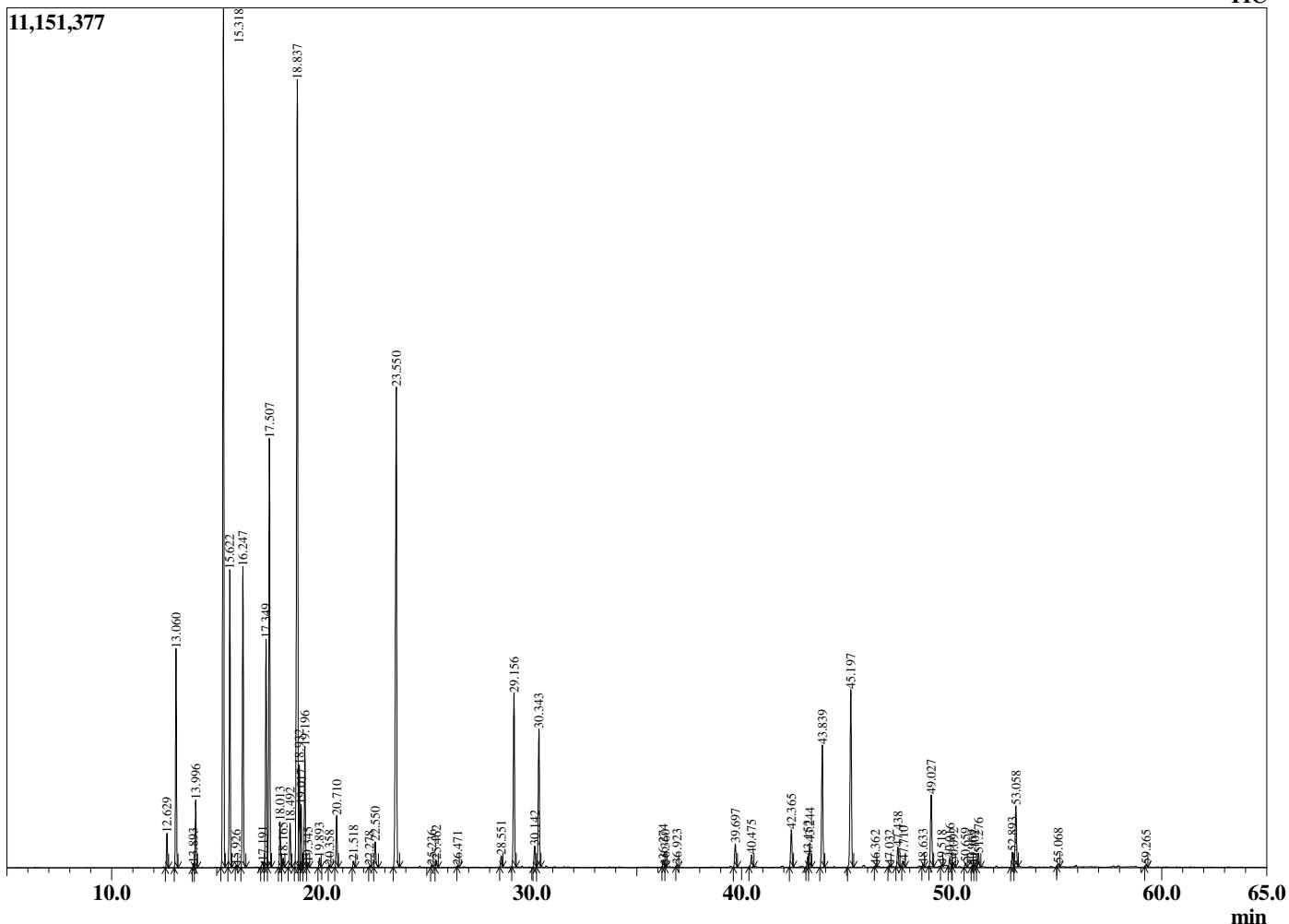
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 4/25/2020 9:02:51 AM
 Sample Type : Essential Oil
 Sample Name : Ravensara aromatica - Barefut
 Sample ID : 0104
 Injection Volume : 0.10
 Instrument ID: GC-3



Peak Report TIC

| | Name | Area% |
|--------|----------------------------|--------|
| 12.629 | alpha-Thujene | 0.53 |
| 13.060 | alpha-Pinene | 3.53 |
| 13.096 | alpha-Fenchene | 0.07 |
| 13.293 | Camphene | 1.12 |
| 13.396 | Sabinene | 15.61 |
| 15.226 | beta-Pinene | 4.89 |
| 15.622 | Unidentified | 0.03 |
| 16.247 | Myrcene | 5.14 |
| 17.349 | Pseudolimonene | 0.13 |
| 17.507 | alpha-Phellandrene | 4.24 |
| 17.837 | delta-3-Carene | 7.41 |
| 18.013 | alpha-Terpinene | 0.81 |
| 18.165 | ortho-Cymene | 0.16 |
| 18.492 | para-Cymene | 0.81 |
| 18.837 | Limonene | 16.72 |
| 18.932 | beta-Phellandrene | 1.60 |
| 19.017 | 1,8-Cineole | 1.05 |
| 19.196 | cis-beta-Ocimene | 2.14 |
| 19.345 | Unidentified | 0.08 |
| 19.893 | trans-beta-Ocimene | 0.17 |
| 20.358 | Unidentified | 0.04 |
| 20.710 | gamma-Terpinene | 0.92 |
| 21.518 | trans-Sabinene hydrate | 0.13 |
| 22.278 | Isoterpinalene | 0.02 |
| 22.550 | Terpinolene | 0.52 |
| 23.550 | Linalool | 10.61 |
| 25.236 | cis-para-Menth-2-en-1-ol | 0.04 |
| 25.462 | allo-Ocimene | 0.13 |
| 26.471 | trans-para-Menth-2-en-1-ol | 0.02 |
| 28.551 | Borneol | 0.22 |
| 29.156 | Terpinen-4-ol | 3.51 |
| 30.142 | alpha-Terpineol | 0.45 |
| 30.343 | Estragole | 2.83 |
| 30.553 | Bornyl acetate | 0.16 |
| 31.518 | (E)-Anethole | 0.03 |
| 32.526 | Dihydroedulan I | 0.06 |
| 32.550 | delta-Elemene | 0.52 |
| 33.445 | alpha-Cubebene | 0.30 |
| 34.035 | alpha-Copaene | 0.85 |
| 34.475 | beta-Cubebene | 0.23 |
| 35.353 | beta-Elemene | 0.55 |
| 36.471 | Methyleugenol | 2.59 |
| 37.196 | beta-Caryophyllene | 4.18 |
| 37.710 | Aromadendrene | 0.02 |
| 38.694 | cis-Murroala-3,5-diene | 0.03 |
| 39.697 | alpha-Humulene | 0.44 |
| 40.475 | Alloaromadendrene | 0.12 |
| 41.462 | trans-Cadina-1(6),4-diene | 0.05 |
| 42.365 | Germacrene D | 1.62 |
| 43.452 | beta-Selinene | 0.04 |
| 43.839 | Bicyclogermacrene | 0.19 |
| 44.452 | alpha-Murolene | 0.09 |
| 44.474 | beta-Bisabolene | 0.09 |
| 44.523 | gamma-Cadinene | 0.02 |
| 45.197 | Cubebol | 0.03 |
| 45.197 | delta-Cadinene | 0.31 |
| 45.622 | Elemicin | 0.32 |
| 46.362 | Elemol | 1.38 |
| 47.710 | Caryophyllene oxide | 0.07 |
| 48.633 | alpha-Eudesmol | 0.05 |
| 49.027 | | 100.00 |

Chromatogram Ravensara aromatica - Barefut



Comments:

The analysis of this *Ravensara aromatica* batch sample meets the expected chemical profile for authentic essential oil of *Ravensara aromatica*. No contamination or adulteration was detected. The results provided in this GCMS quality analysis reflect the chemical composition of the oil and lot referenced above on the date of analysis.