以下GC/MS分析圖　僅代表【芳療主播ALYSA】精油資訊

薑

Certificate of Analysis

Product: Ginger Oil

Origin:	China
Botanical Name:	*Zingiber officinale*
Part of Plant:	Root
Extraction:	Steam Distillation

Parameter	Specification[2]	Result
Appearance:	Clear mobile liquid	Complies
Colour:	Pale yellow to yellow	Complies
Odour:	Characteristic	Complies

Physio-chemical properties

Relative Density at 20° C:	0.8700 to 0.8900	0.8763
Refractive Index at 20° C:	1.4700 to 1.5100	1.4885
Optical Rotation:	-20.00° to -47.00°	-35.05[0]

Chromatographic Profile

Component	Specification[2] Peak Area[1] (%)	Result Peak Area[1] (%)
a-pinene	Trace to 5	1.61
Camphene	Trace to 10.5	5.50
Ar-curcumene	2 to 25	7.56
zingiberene	10 to 45	37.03
Alpha- Farnesene	Trace to 10	7.59
Beta-Bisabolene	Trace to 10	7.59
Beta- Sesquiphellandrene	5 to 20	14.14

Note (1) Analytical conditions: GC Column: Rxi-5SilMS, Length: 30.0m, Inside Diameter: 0.25mm, Thickness: 0.25µm
Mass Spectrometer: Detector Type: Quadrupole MS, Ion Source: EI, Ion Source Temp: 200.0°C
Oven Temp. Program(°C): 50.0 to 270.0,Temp Rate: 5.0

Sample Name : Ginger Oil

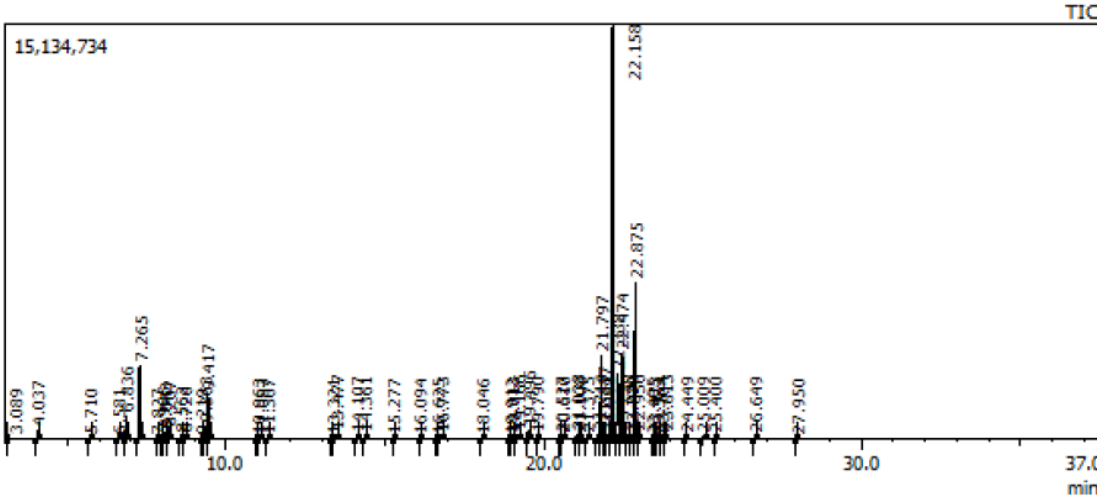
Analytical Column:
Name : Rxi-5SilMS Length : 30.0m Inside Diameter : 0.25mm
Thickness : 0.25um
Serial # : 1060940
Mass Spectrometer
Detector Type : Quadrupole MS
Ion Source : EI Ion Source Temp : 200.00°C

GC Method

====== Analytical Line 1 ======
Oven Temp. Program

Rate	Temperature(°C)	Hold Time(min)
-	50.0	0.00
5.00	220.0	1.00
20.00	270.0	0.00

P:\QC-GCMS Backup\2012\100% Pure Essential Oils\Ginger\Ginger Oil_1002925_1.qgd



#	R.T.	Area	Area%	Hit%	CAS No.	Name of Best Match
1	3.089	21740	0.02	91	105-57-7	1. Ethane, 1,1-diethoxy-
2	4.037	522757	0.47	97	66-25-1	2. Hexanal
3	5.710	81697	0.07	95	110-43-0	3. 2-Heptanone
4	6.581	127970	0.11	96	508-32-7	4. Tricyclene
5	6.836	1805273	1.61	97	80-56-8	5. .alpha.-Pinene
6	7.265	6176009	5.50	97	79-92-5	6. Camphene
7	7.827	57585	0.05	91	3387-41-5	7. Sabinene
8	7.985	229646	0.20	89	555-10-2	8. .beta.-Phellandrene
9	8.043	563928	0.50	96	110-93-0	9. 5-Hepten-2-one, 6-methyl-
10	8.207	665828	0.59	96	123-35-3	10. .beta.-Myrcene
11	8.562	170723	0.15	96	124-13-0	11. Octanal
12	8.720	218535	0.19	92	99-83-2	12. .alpha.-Phellandrene
13	9.219	43358	0.04	91	527-84-4	13. o-Cymene
14	9.363	1093310	0.97	85	288-32-4	14. 1H-Imidazole
15	9.417	6550423	5.84	89	17699-16-0	15. trans-Sabinene hydrate
16	10.963	162190	0.14	93	586-62-9	16. Cyclohexene, 1-methyl-4-(1-methylethylidene)-
17	11.087	159231	0.14	79	99172-18-6	17. 3,5-Heptadienal, 2-ethylidene-6-methyl-

18	11.307	154903	0.14	86	78-70-6	18. 1,6-Octadien-3-ol, 3,7-dimethyl-
19	13.321	71137	0.06	80	31061-64-0	19. Tricyclo[4.3.1.1(3,8)]undecan-1-ol
20	13.477	470903	0.42	97	507-70-0	20. endo-Borneol
21	14.107	257816	0.23	94	98-55-5	21. .alpha.-Terpineol
22	14.361	234469	0.21	96	112-31-2	22. Decanal
23	15.277	44985	0.04	93	106-26-3	23. Neral
24	16.094	108796	0.10	95	141-27-5	24. 2,6-Octadienal, 3,7-dimethyl-, (E)-
25	16.625	80162	0.07	93	92618-89-8	25. Acetic acid, 1,7,7-trimethyl-bicyclo[2.2.1]hept-2-yl ester
26	16.773	193479	0.17	93	112-12-9	26. 2-Undecanone
27	18.046	124600	0.11	91	20307-84-0	27. Cyclohexene, 4-ethenyl-4-methyl-3-(1-methylethenyl)-1
28	18.912	42617	0.04	91	13019-16-4	28. 2-Octenal, 2-butyl-
29	19.013	442385	0.39	91	22469-52-9	29. 1,2,4-Metheno-1H-indene, octahydro-1,7a-dimethyl-5-(
30	19.166	545773	0.49	97	3856-25-5	30. a-Copaene
31	19.496	877010	0.78	96	515-13-9	31. Cyclohexane, 1-ethenyl-1-methyl-2,4-bis(1-methylether
32	19.790	277373	0.25	92	495-60-3	32. 1,3-Cyclohexadiene, 5-(1,5-dimethyl-4-hexenyl)-2-meth
33	20.527	226495	0.20	89	3242-08-8	33. Cyclohexane, 1-ethenyl-1-methyl-2-(1-methylethenyl)-4
34	20.610	170199	0.15	91	17699-05-7	34. Bicyclo[3.1.1]hept-2-ene, 2,6-dimethyl-6-(4-methyl-3-pe
35	21.038	449360	0.40	83	495-61-4	35. .beta.-Bisabolene
36	21.108	315595	0.28	92	20307-83-9	36. Cyclohexene, 3-(1,5-dimethyl-4-hexenyl)-6-methylene-
37	21.375	260811	0.23	96	25246-27-9	37. Alloaromadendrene
38	21.714	491291	0.44	No hit compound		38.
39	21.797	8487191	7.56	98	644-30-4	39. Ar-Curcumene
40	21.887	1445038	1.29	97	37839-63-7	40. Germacrene D
41	21.981	326760	0.29	88	0-00-0	41. Guaia-1(10),11-diene
42	22.158	41558138	37.03	92	495-60-3	42. Zingiberene
43	22.338	8522054	7.59	91	502-61-4	43. .alpha.-Farnesene
44	22.474	8517806	7.59	95	495-61-4	44. .beta.-Bisabolene
45	22.648	470371	0.42	90	54274-73-6	45. (+)-epi-Bicyclosesquiphellandrene
46	22.770	378174	0.34	81	483-76-1	46. delta-Cadinene
47	22.875	15869498	14.14	93	20307-83-9	47. beta.-Sesquiphellandrene
48	22.950	419194	0.37	88	502-61-4	48. .alpha.-Farnesene
49	23.405	59681	0.05	No hit compound		49.
50	23.473	191371	0.17	90	639-99-6	50. Cyclohexanemethanol, 4-ethenyl-.alpha.,.alpha.,4-trime
51	23.583	126483	0.11	92	0-00-0	51. 7-epi-trans-sesquisabinene hydrate
52	23.704	176693	0.16	89	40716-66-3	52. 1,6,10-Dodecatrien-3-ol, 3,7,11-trimethyl-, (E)-
53	23.813	438613	0.39	91	15423-57-1	53. 1,5-Cyclodecadiene, 1,5-dimethyl-8-(1-methylethyliden
54	24.449	123983	0.11	87	0-00-0	54. trans-Sesquisabinene hydrate
55	25.009	319890	0.29	90	0-00-0	55. 7-epi-cis-sesquisabinene hydrate
56	25.400	116701	0.10	84	0-00-0	56. 7-epi-cis-sesquisabinene hydrate
57	26.649	131210	0.12	85	28976-67-2	57. .beta.-curcumene
58	27.950	53083	0.05	71	0-00-0	58. 2-(1,4,4-Trimethyl-cyclohex-2-enyl)-ethanol