

Internal Code: A / 6576



Customer Identification

Company Name ChromEssence

Address

Commercial Name

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Sample Identification

Product Name Rosemary Es.Oil CT Camphor

Date Received 10/07/2023 10:25

Product Type Essential oils

Report Issue Date 12/07/2023 00:00

Botanical Name *Rosmarinus officinalis*

Batch 4460

Label name AE DE ROMERO QT ALCANFOR ECO

Norm/Specification ISO 1342:2012

Essential Oils Characterization (Chemotyping)

Chromatographic Analysis

Essential Oils Characterization

Method: Internal + ISO 7609

Technique: GC-FID + GC-MS.

Components are identified by GC-MS, being processed by a deconvolution algorithm, and quantified by GC-FID, using the internal normalization method.

Acquisition through two chromatographs in parallel (one with polar column and the other apolar), to ensure the resolution of all components with high reliability. All the data obtained from both lines are processed by an algorithm that select the most accurate ones.

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Operating Conditions:

POLAR COLUMN EQUIPMENT: GC (FID) 8890 / MS 5977B. Column: DB_WAX UI 60m x 0.25mm x 0.5 µm. Carrier gas: Helium.

Injection: 1.0 µl (FID), 1.0 µl (MSD). Dil. 1:10. Split 100:1. Mass Range: 33 to 350.

Temperature Program: 6 min at 50°C -> 2°C/min to 190°C -> 4°C/min to 220°C -> 10 min at 220°C -> 4°C/min to 240°C -> 10 min at 240°C

APOLAR COLUMN EQUIPMENT: GC (FID) 8890 / MS 5977B. Column: HP-5MS Ultra Inert 60m x 0.25mm x 0.25 µm. Carrier gas: Helium.

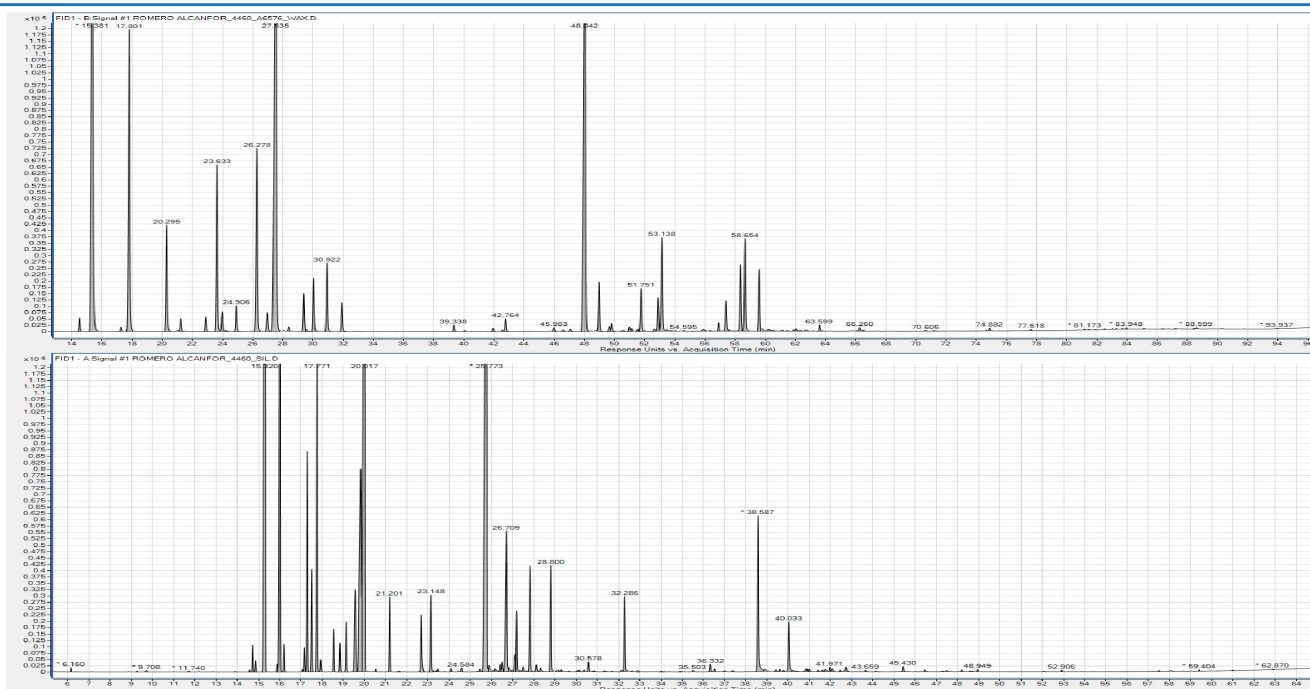
Injection: 1.0 µl (FID), 1.0 µl (MSD). Dil. 1:10. Split 100:1. Mass Range: 33 to 350 up to minute 66, 50 to 500 up to the end.

Temperature Program: 0 min at 50°C -> 3°C/min to 220°C -> 10°C/min to 285°C -> 9 min at 285°C

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Chromatogram



RI-WAX	RI-HP5	Compounds	CAS Nº	%	Specification	Chemical Family	IFRA Restriction
1009	924	Tricyclene	508-32-7	0.31		Monoterpene	
	922	5,5-Dimethyl-1-vinylbicyclo[2.1.1]hexane	16626-39-4	0.03		Monoterpene	
1029	918	Alpha-Thujene	2867-05-2	0.14		Monoterpene	
1025	933	Alpha-Pinene	80-56-8	19.83	18.00 - 26.00	Monoterpene	Cosmetic Allergen
1060	948	Alpha-Fenchene	471-84-1	0.10		Monoterpene	
1069	953	Camphene	79-92-5	8.03	7.00 - 13.00	Monoterpene	
1114	978	Beta-Pinene	127-91-3	2.61	2.00 - 5.00	Monoterpene	Cosmetic Allergen
1126	972	Sabinene	3387-41-5	0.03		Monoterpene	
1130	971	Verbenene	4080-46-0	0.31		Monoterpene	
1572	1076	n-Octanol	111-87-5	0.01		Aliphatic alcohol	
1158	1009	Delta-3-Carene	13466-78-9	0.35		Monoterpene	
1165	991	Beta-Myrcene	123-35-3	4.01	2.50 - 4.50	Monoterpene	
1170	997	Alpha-Phellandrene	99-83-2	0.46		Monoterpene	
1172	1004	p-Mentha-1(7),8-diene (Pseudolimonene)	499-97-8	0.03		Monoterpene	
1186	1018	Alpha-Terpinene	99-86-5	0.61		Monoterpene	Cosmetic Allergen
1664	1125	Trans-Pinocarveol	547-61-5	0.06		Monoterpenic alcohol	

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1206	1021	Limonene	5989-27-5	5.00	2.50 - 5.50	Monoterpene	Cosmetic Allergen
1536	1160	Cis-Pinocamphone	547-60-4	0.09		Monoterpenic ketone	
1218	1031	Beta-Phellandrene	555-10-2	0.57		Monoterpene	
1222	1039	1,8-Cineole	470-82-6	20.14	16.00 - 23.00	Monoterpenic ether	
1806	1209	Alpha-Campholenol	1901-38-8	0.07		Monoterpenic alcohol	
1238	1035	Cis-Beta-Ocimene	3338-55-4	0.11		Monoterpene	
1254	1058	Gamma-Terpinene	99-85-4	0.87		Monoterpene	
1256	1046	Trans-Beta Ocimene	3779-61-1	0.04		Monoterpene	
1262	986	3-Octanone	106-68-3	1.19		Aliphatic ketone	
1278	1025	Para-Cymene	99-87-6	1.60	1.00 - 2.00	Monoterpene	
1291	1086	Alpha-Terpinolene	586-62-9	0.68		Monoterpene	Cosmetic Allergen
1511	1379	Alpha-Copaene	3856-25-5	0.04		Sesquiterpene	
1400	995	3-Octanol	589-98-0	0.16		Aliphatic alcohol	
1746	1501	Alpha-Muurolene	31983-22-9	0.04		Sesquiterpene	
1446	1093	Alpha-p-Dimethylstyrene	1195-32-0	0.09		Monoterpene	
1444	1107	Filifolone	4613-37-0	0.03		Monoterpenic ketone	
1441	975	1-Octen-3-ol	3391-86-4	0.27		Aliphatic alcohol	
1501	1371	Alpha-Ylangene	14912-44-8	0.11		Sesquiterpene	
1473	1351	Alpha-Cubebene	17699-14-8	0.05		Sesquiterpene	
1526	1122	Chrysanthenone	473-06-3	0.08		Monoterpenic ketone	
1541	1149	Camphor	76-22-2	17.36	12.50 - 22.00	Monoterpenic ketone	Cosmetic Allergen
1553	1100	Linalool	78-70-6	1.10	0.50 - 2.50	Monoterpenic alcohol	Cosmetic Allergen
1558	1255	Linalyl Acetate	115-95-7	0.13		Monoterpenic ester	Cosmetic Allergen
1565	1176	Cis-Isopinocamphone	15358-88-0	0.20		Monoterpenic ketone	
1581	1151	Cis-Isopulegol	89-79-2	0.03		Monoterpenic alcohol	
1589	1164	Pinocarvone	16812-40-1	0.10		Monoterpenic ketone	
1589	1562	Trans-Isopulegol	89-79-2	0.06		Monoterpenic alcohol	
1582	1112	Fenchol<exo->	22627-95-8	0.05		Monoterpenic alcohol	
1599	1288	Bornyl Acetate	76-49-3	1.03	0.50 - 2.50	Monoterpenic ester	
1608	1148	Camphene Hydrate	465-31-6	0.05		Monoterpenic alcohol	
1622	1184	Terpinen-4-ol	562-74-3	0.74	0.40 - 1.50	Monoterpenic alcohol	

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1617	1450	Trans-Beta Caryophyllene	87-44-5	2.52		Sesquiterpene	Cosmetic Allergen
1623	1444	Guaia-6,9-diene	37839-64-8	0.04		Sesquiterpene	
1662	1170	Delta-Terpineol	7299-42-5	0.20		Monoterpenic alcohol	
1694	1454	Alpha-Humulene	6753-98-6	0.81		Sesquiterpene	
1700	1485	Gamma-Murolene	24268-39-1	0.06		Sesquiterpene	
1696	1195	Alpha-Terpineol	98-55-5	1.52	1.00 - 4.00	Monoterpenic alcohol	Cosmetic Allergen
1713	1167	Borneol	507-70-0	2.32	1.00 - 4.50	Monoterpenic alcohol	
1736	1208	Verbenone	80-57-9	1.57	0.70 - 2.50	Monoterpenic ketone	
1731	1506	Beta-Bisabolene	495-61-4	0.05		Sesquiterpene	
1758	1380	Geranyl Acetate	105-87-3	0.03		Monoterpenic ester	Cosmetic Allergen
1777	1232	Citronellol	106-22-9	0.03		Monoterpenic alcohol	Cosmetic Allergen
1776	1524	Delta-Cadinene	483-76-1	0.06		Sesquiterpene	
1798	1202	Myrtenol	515-00-4	0.10		Monoterpenic alcohol	
1839	1189	Para-Cymen-8-ol	1197-01-9	0.06		Monoterpenic alcohol	
2014	1578	Caryophyllene Oxide	1139-30-6	0.09		Sesquiterpenic epoxide	
2073	1613	Humulene Epoxide II	19888-34-7	0.05		Sesquiterpenic epoxide	
2226	1701	Alpha-Bisabolol	23089-26-1	0.04		Sesquiterpenic alcohol	Dermal Sens. and Systemic Tox.
Total Identified (%)		98.55					
Total Area:		5.0E+6					

Conclusion

The sample meets ISO specifications for Rosemary Es. Oil CT Camphor