



Essential Oil University

GC/MS Report

Item	Lot
Turmeric EO	4F
<i>Curcuma longa</i>	
Date	Analyst
11/25/2025	Dr. Robert S. Pappas

© Copyright 2025 by Essential Oil University. All rights reserved. Any publishing, copying, use, dissemination, or distribution of this report, including online, without the express written permission of Essential Oil University is strictly prohibited.

The analysis of this batch sample, Turmeric EO, meets the expected chemical profile for authentic essential oil of *Curcuma longa*. 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.



Sample Information

Company: Revive**Sample Name:** Turmeric EO**Botanical Name:** Curcuma longa**Lot Number:** 4F**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** India**Analysis Date:** 11/25/2025**Manufacture Date:** August 2025

GC/MS

Inst. ID: Shimadzu GCMS-QP2010Ultra**Injection Type:** Split**Split Ratio:** 24.4**Column Type:** ZB-5**Injection Volume:** 0.1 µL**Temperature Program:** 2C/min

Physical Data

ANALYSIS

Optical Rotation @20°C

Refractive Index @20°C

Specific Gravity @20°C

METHOD

USP[781]

USP[831]

USP[841]

RESULTS

-6.04

1.50779

0.93539



Ret. Time	Component	Ret. Idx.	Conc. %	
12.426	alpha-Thujene	924	0.13%	
12.851	alpha-Pinene	931	0.77%	ALLERGEN
13.785	Camphene	948	0.09%	
15.071	Sabinene	970	0.14%	
15.390	beta-Pinene	976	0.09%	ALLERGEN
16.006	Myrcene	987	0.17%	PROP. 65
17.108	alpha-Phellandrene	1005	1.72%	
17.250	delta-3-Carene	1007	0.05%	
17.764	alpha-Terpinene	1015	0.05%	ALLERGEN
18.252	para-Cymene	1023	0.98%	
18.557	Limonene	1027	1.03%	ALLERGEN IFRA
18.672	beta-Phellandrene	1029	0.2%	
18.767	1,8-Cineole	1030	3.38%	
19.647	trans-beta-Ocimene	1043	0.05%	
20.463	gamma-Terpinene	1056	0.12%	
22.299	Terpinolene	1083	0.04%	ALLERGEN
23.251	Linalool	1098	0.02%	ALLERGEN IFRA
26.582	Camphor	1146	0.02%	ALLERGEN
28.891	Terpinen-4-ol	1179	0.03%	
29.896	alpha-Terpineol	1193	0.06%	ALLERGEN
30.102	Estragole	1196	0.01%	PROP. 65 IFRA
35.105	Unidentified	1269	0.02%	
38.356	Unidentified	1317	0.03%	
43.690	Unidentified	1398	0.03%	
43.787	alpha-Funebrene	1400	0.17%	
44.482	cis-alpha-Bergamotene	1411	0.06%	
44.575	Acora-3,7(14)-diene	1412	0.02%	
44.850	alpha-Santalene	1417	1.93%	
45.492	gamma-Elemene	1427	0.09%	
45.732	trans-alpha-Bergamotene	1431	0.09%	
45.860	alpha-Teresantalic acid isomer	1433	0.17%	
46.440	Unidentified	1442	0.13%	
46.580	Unidentified	1444	0.08%	
46.615	epi-beta-Santalene	1445	0.19%	
46.962	trans-beta-Farnesene	1450	0.57%	
47.161	alpha-Humulene	1454	0.24%	
47.230	Amorpha-4,11-diene	1455	0.05%	
47.383	epi-beta-Santalene	1457	0.04%	
47.675	alpha-Acoradiene	1462	0.06%	
48.524	gamma-Curcumene	1475	0.11%	



Ret. Time	Component	Ret. Idx.	Conc. %	
48.734	Ar-Curcumene	1479	4.85%	
48.923	trans-beta-Bergamotene	1482	0.09%	
49.141	Unidentified	1485	0.09%	
49.260	Unidentified	1487	0.03%	
49.603	alpha-Zingiberene	1493	6.84%	
49.835	gamma-Amorphene	1496	0.03%	
49.934	cis-alpha-Bisabolene	1498	0.05%	
50.138	Dihydrocurcumene isomer	1501	0.1%	
50.382	beta-Bisabolene	1505	1.91%	
50.465	beta-Curcumene	1507	0.13%	
50.540	cis-gamma-Bisabolene	1508	0.07%	
50.706	Sesquicineole	1511	0.02%	
50.995	alpha-Teresantalic acid isomer	1516	1.91%	
51.359	beta-Sesquiphellandrene	1522	8.31%	
51.515	trans-gamma-Bisabolene	1524	0.38%	
51.570	Unidentified	1525	0.14%	
51.992	Unidentified	1532	0.06%	
52.138	Selina-4(15),7(11)-diene	1535	0.08%	
52.429	Unidentified	1540	0.23%	
52.842	Unidentified	1547	0.04%	
53.009	Unidentified	1549	0.05%	
53.141	Sesquisabinene hydrate isomer	1552	0.17%	
53.165	Unidentified	1552	0.16%	
53.441	Germacrene B	1557	0.27%	
53.520	Unidentified	1558	0.14%	
53.948	Unidentified	1565	0.08%	
54.267	Unidentified	1571	0.12%	
54.386	Unidentified	1573	0.14%	
54.524	ar-Tumerol	1575	1.24%	
54.540	Unidentified	1575	0.67%	
54.809	Caryophyllene oxide	1580	0.09%	
55.084	Unidentified	1584	0.02%	
55.252	Unidentified	1587	0.56%	
55.720	Unidentified	1595	0.07%	
55.912	Unidentified	1598	0.19%	
56.026	Unidentified	1600	0.23%	
56.161	Unidentified	1603	0.14%	
56.250	Unidentified	1604	0.21%	
56.388	Unidentified	1607	0.06%	
56.650	cis-Zingiberenol	1611	0.6%	



Ret. Time	Component	Ret. Idx.	Conc. %	
57.020	anti-syn-syn-Helifolen-12-al C	1618	0.41%	
57.199	Unidentified	1621	0.14%	
57.626	trans-Zingiberenol	1629	0.51%	
57.818	Unidentified	1632	0.79%	
57.997	Unidentified	1635	0.16%	
58.345	Unidentified	1641	0.27%	
58.460	Unidentified	1643	0.06%	
58.648	Unidentified	1647	0.04%	
59.091	Unidentified	1655	0.18%	
59.494	Ar-tumerone	1662	19.92%	
59.705	allo-Himachalol	1665	2.55%	
59.787	Tumerone	1667	11.66%	
59.845	beta-Bisabolol	1668	0.78%	
60.035	Unidentified	1671	0.15%	
60.129	Unidentified	1673	0.29%	
60.287	trans-alpha-trans-Bergamotal	1676	0.15%	
60.726	Unidentified	1683	0.41%	
60.785	Unidentified	1685	0.14%	
61.150	Germacrone	1691	0.16%	
61.174	Unidentified	1691	0.18%	
61.349	Curlone isomer	1695	0.23%	
61.584	Curlone	1699	10.78%	
61.838	Unidentified	1703	0.08%	
62.181	Curcuphenol	1710	0.3%	
62.595	Unidentified	1717	0.04%	
62.829	Unidentified	1722	0.05%	
63.534	Unidentified	1735	0.04%	
63.774	Unidentified	1739	0.88%	
63.974	Unidentified	1743	0.11%	
64.066	Unidentified	1745	0.13%	
64.375	Unidentified	1751	0.14%	
64.758	Unidentified	1758	0.39%	
64.863	Unidentified	1760	0.3%	
65.417	trans-alpha-Atlantone	1770	1.58%	
65.796	Unidentified	1777	0.15%	
66.206	Unidentified	1785	0.05%	
66.321	Unidentified	1787	0.15%	
66.439	Unidentified	1789	0.18%	
66.603	Unidentified	1792	0.04%	
66.725	Unidentified	1794	0.03%	



Ret. Time	Component	Ret. Idx.	Conc. %	
67.178	Unidentified	1803	0.22%	
67.382	Unidentified	1807	0.26%	
67.501	Unidentified	1809	0.06%	
68.380	Unidentified	1826	0.03%	
68.727	Unidentified	1833	0.06%	
68.895	Unidentified	1837	0.02%	
69.910	Unidentified	1856	0.02%	
70.045	Unidentified	1859	0.03%	
70.948	Unidentified	1877	0.27%	
71.823	Unidentified	1894	0.13%	
73.016	Unidentified	1918	0.05%	
73.415	Unidentified	1926	0.23%	
76.095	Unidentified	1981	0.16%	
92.279	Unidentified	2346	0.05%	
99.300	Unidentified	2522	0.03%	

Total Identified Compounds **89.11 %**



TIC
8,292,864

