



Essential Oil University

GC/MS Report

Item	Lot
Turmeric EO	3E
<i>Curcuma longa</i>	
Date	Analyst
3/4/2025	Dr. Robert S. Pappas

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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:** 3E**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** India**Analysis Date:** 3/4/2025**Manufacture Date:** February 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

-1.52

1.50822

0.93421



Ret. Time	Component	Ret. Idx.	Conc. %	
11.481	Tricyclene	921	0%	
11.630	alpha-Thujene	923	0.13%	
12.028	alpha-Pinene	931	0.76%	
12.913	Camphene	947	0.09%	
14.160	Sabinene	970	0.14%	
14.454	beta-Pinene	975	0.09%	
14.802	6-Methyl hept-5-en-2-one	982	0.02%	
15.082	Myrcene	987	0.18%	
16.129	alpha-Phellandrene	1005	1.65%	
16.269	delta-3-Carene	1007	0.04%	
16.779	alpha-Terpinene	1015	0.06%	
17.259	para-Cymene	1023	1%	
17.554	Limonene	1027	1.05%	IFRA
17.670	beta-Phellandrene	1029	0.18%	
17.735	1,8-Cineole	1030	3.98%	
17.955	cis-beta-Ocimene	1033	0.01%	
18.625	trans-beta-Ocimene	1044	0.05%	
19.400	gamma-Terpinene	1056	0.12%	
21.185	Terpinolene	1083	0.02%	
27.659	Terpinen-4-ol	1178	0.05%	
28.662	alpha-Terpineol	1193	0.09%	
29.200	alpha-Phellandrene epoxide	1201	0.02%	
33.823	Unidentified	1269	0.05%	
37.051	Unidentified	1317	0.03%	
42.318	Unidentified	1397	0.05%	
42.458	alpha-Funebrene	1399	0.19%	
43.130	cis-alpha-Bergamotene	1410	0.04%	
43.199	Unidentified	1411	0.02%	
43.293	alpha-Cedrene	1413	0.02%	IFRA
43.490	alpha-Santalene	1416	1.26%	
44.142	gamma-Elemene	1426	0.22%	
44.372	trans-alpha-Bergamotene	1430	0.07%	
44.493	Unidentified	1432	0.09%	
45.064	beta-Bisabolonal	1441	0.14%	
45.175	Unidentified	1443	0.02%	
45.244	epi-beta-Santalene	1444	0.15%	
45.632	trans-beta-Farnesene	1450	0.49%	
45.758	alpha-Humulene	1452	0.2%	
45.890	Amorpha-4,11-diene	1454	0.03%	
46.283	alpha-Acoradiene	1461	0.06%	



Ret. Time	Component	Ret. Idx.	Conc. %	
46.972	Unidentified	1472	0.02%	
47.162	gamma-Curcumene	1475	0.1%	
47.381	Ar-Curcumene	1478	5.21%	
47.545	trans-beta-Bergamotene	1481	0.07%	
47.738	3,5,11-Eudesmatriene	1484	0.09%	
47.850	beta-Selinene	1486	0.03%	
48.251	alpha-Zingiberene	1492	5.86%	
48.447	gamma-Cadinene	1495	0.03%	
48.578	cis-alpha-Bisabolene	1497	0.02%	
48.803	Unidentified	1501	0.06%	
48.815	trans,trans-alpha-Farnesene	1501	0.03%	
49.021	beta-Bisabolene	1505	1.6%	
49.114	beta-Curcumene	1506	0.1%	
49.205	Unidentified	1508	0.03%	
49.610	Unidentified	1515	1.18%	
50.003	beta-Sesquiphellandrene	1521	8.54%	
50.148	trans-gamma-Bisabolene	1524	0.28%	
50.220	Unidentified	1525	0.08%	
50.634	Unidentified	1532	0.06%	
50.727	Selina-4(15),7(11)-diene	1534	0.18%	
51.015	Selina-3,7(11)-diene	1538	0.28%	
51.456	Unidentified	1546	0.03%	
51.636	Unidentified	1549	0.06%	
51.758	Sesquisabinene hydrate isomer	1551	0.21%	
51.830	Unidentified	1552	0.07%	
52.009	Germacrene B	1555	0.49%	
52.154	Unidentified	1558	0.12%	
52.574	Unidentified	1565	0.11%	
52.891	Unidentified	1570	0.11%	
52.993	Unidentified	1572	0.12%	
53.126	Ar-Tumerol	1574	1.39%	
53.361	Caryophyllene oxide	1578	0.04%	
53.694	Unidentified	1584	0.03%	
53.856	Unidentified	1586	0.47%	
53.975	Unidentified	1588	0.05%	
54.331	Unidentified	1594	0.05%	
54.525	Unidentified	1598	0.21%	
54.651	Unidentified	1600	0.18%	
54.754	Unidentified	1602	0.1%	
54.872	Unidentified	1604	0.17%	



Ret. Time	Component	Ret. Idx.	Conc. %
54.975	Unidentified	1606	0.03%
55.257	cis-Zingiberenol	1611	0.56%
55.355	Unidentified	1612	0.03%
55.633	anti-syn-syn-Helifolen-12-al C	1617	0.38%
55.810	Unidentified	1621	0.1%
56.231	trans-Zingiberenol	1628	0.54%
56.422	Unidentified	1631	0.76%
56.605	Unidentified	1635	0.11%
56.944	Unidentified	1641	0.25%
57.015	Unidentified	1642	0.05%
57.528	Unidentified	1651	0.04%
57.703	Unidentified	1654	0.14%
58.139	Ar-Tumerone	1662	23.38%
58.330	allo-Himachalol	1665	2.52%
58.408	Tumerone	1667	11.45%
58.626	Unidentified	1671	0.1%
58.715	Unidentified	1672	0.19%
58.856	trans-alpha-trans-Bergamotal	1675	0.07%
59.333	Unidentified	1683	0.4%
59.375	Unidentified	1684	0.19%
59.500	Unidentified	1686	0.03%
59.670	Germacrone	1689	0.03%
59.776	Unidentified	1691	0.19%
59.953	Curlone isomer	1694	0.24%
60.196	Curlone	1699	11.59%
60.365	Unidentified	1702	0.02%
60.438	Unidentified	1703	0.05%
60.785	cis-alpha-Atlantone	1709	0.27%
61.178	Unidentified	1717	0.03%
61.408	cis-Nuciferol	1721	0.11%
62.366	Unidentified	1739	1.01%
62.573	Unidentified	1743	0.15%
62.651	Unidentified	1744	0.15%
62.940	Unidentified	1750	0.09%
63.325	Unidentified	1757	0.24%
63.441	Unidentified	1759	0.22%
63.843	Unidentified	1767	0.07%
64.004	trans-alpha-Atlantone	1770	1.45%
64.351	Unidentified	1776	0.11%
64.772	Unidentified	1784	0.07%



Ret. Time	Component	Ret. Idx.	Conc. %	
64.893	Unidentified	1786	0.14%	
65.030	Unidentified	1789	0.17%	
65.700	Unidentified	1802	0.03%	
65.755	Unidentified	1803	0.21%	
65.900	Unidentified	1805	0.07%	
65.941	Unidentified	1806	0.14%	
66.087	Unidentified	1809	0.07%	
66.951	Unidentified	1826	0.04%	
67.249	Unidentified	1832	0.03%	
67.329	Unidentified	1834	0.03%	
67.470	Unidentified	1836	0.03%	
68.476	Unidentified	1856	0.04%	
68.627	Unidentified	1859	0.04%	
69.502	Unidentified	1876	0.27%	
70.382	Unidentified	1894	0.13%	
71.595	Unidentified	1918	0.07%	
72.007	Unidentified	1927	0.23%	
74.642	Unidentified	1981	0.15%	

Total Identified Compounds **89.74 %**

