

Certificate of Analysis

Butylated hydroxyanisole

PurCert Standard for GC

Product Number	PSR37687	CAS No.	25013-16-5
Brand	PureSynth	Lot No.	B37687S0525
Molecular Formula	C ₁₁ H ₁₆ O ₂	Date of Mfg.	May, 2025
Molecular Weight	180.24 g/mol	Date of Exp.	April, 2030

Test	Specification	Result
Description	White to Light Yellow Powder	Conforms
Assay (by GC)	≥ 99.0 %	99.96 %
Water (by KF)	NMT 0.3 %	0.140 %
Density	1.04 – 1.06 g/cm ³	1.05 g/cm ³
Identification by ¹ H NMR	Conforms to structure	Conforms
Identification by GC-MS	Conforms to molecular mass	Conforms
Identification by IR	Conforms to structure	Conforms

***Traceable to Internal Reference Standard.**

Storage Condition: Store at ambient temperature and keep container tightly closed in a dry and well-Ventilated place.

Remark: The batch complies with the prescribed quality of the above specification.

Assay by GC-FID

METHOD: GC- FID conditions:

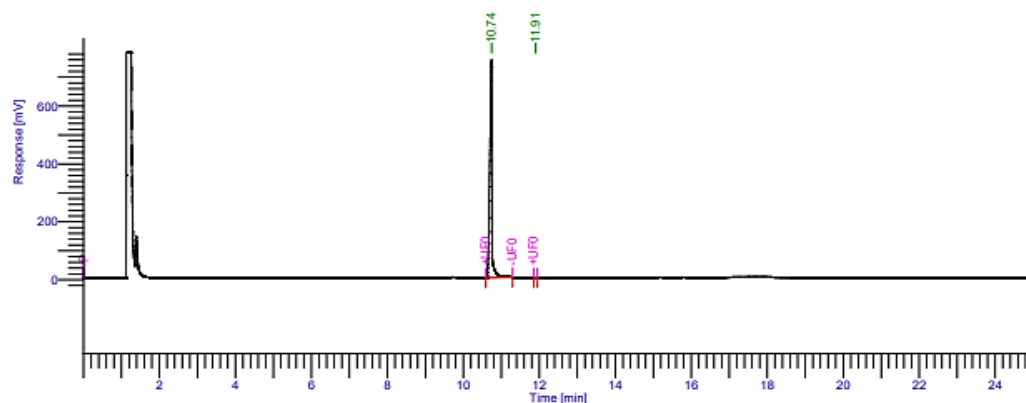
Column: Agilent Technologies DB-FFAP 30mx 0.530mm, 1.0micron

Instrument: PerkinElmer, GC 2014,

Detector: FID, **Carrier gas:** Nitrogen

Temp programming: Initial 50°C hold for 1min, 5° C Ramp/ min., 100 °C hold for 1 min., 25°C Ramp up to 250°C hold for 2 min., Run time 20 min.

Software Version	: 6.3.4.0700	Date	: 18-06-2025 16:21:28
Operator	: manager	Sample Name	: BUTYLTED HYDROXYANISOLE
Sample Number	: 001	Study	:
AutoSampler	: BUILT-IN	Rack/Vial	: 0/45
Instrument Name	: Clarus 690	Channel	: A
Instrument Serial #	: None	A/D mV Range	: 1000
Delay Time	: 0.00 min	End Time	: 25.00 min
Sampling Rate	: 12.5000 pts/s		
Sample Volume	: 1.000000 ul	Area Reject	: 0.000000
Sample Amount	: 1.0000	Dilution Factor	: 1.00
Data Acquisition Time	: 18-06-2025 15:24:03	Cycle	: 1



GC Reports

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Area [%]
1		10.743	2985264.01	752552.16	99.96
2		11.907	1322.64	599.45	0.04
			2986586.65	753151.61	100.00

Warning – Signal level out-of-range in peak

Missing Component Report

Component Expected Retention (Calibration File)

All components were found

Purity by GC-FID: 99.96%

IDENTIFICATION TESTS

GC-MS Spectrum:

METHOD: GC-MS conditions:

Column: Agilent Technologies, Elite -5MS, 30 m X 0.25 mm, 1.0micron

Instrument: Perkin Elmer, **Carrier gas:** Helium

Source Temp.: 230°C, **Transfer line:** 250°C

Inlet Temp.: 180°C, **Diluent:** Methanol

Source energy: 70eV

Mass by GC-MS:

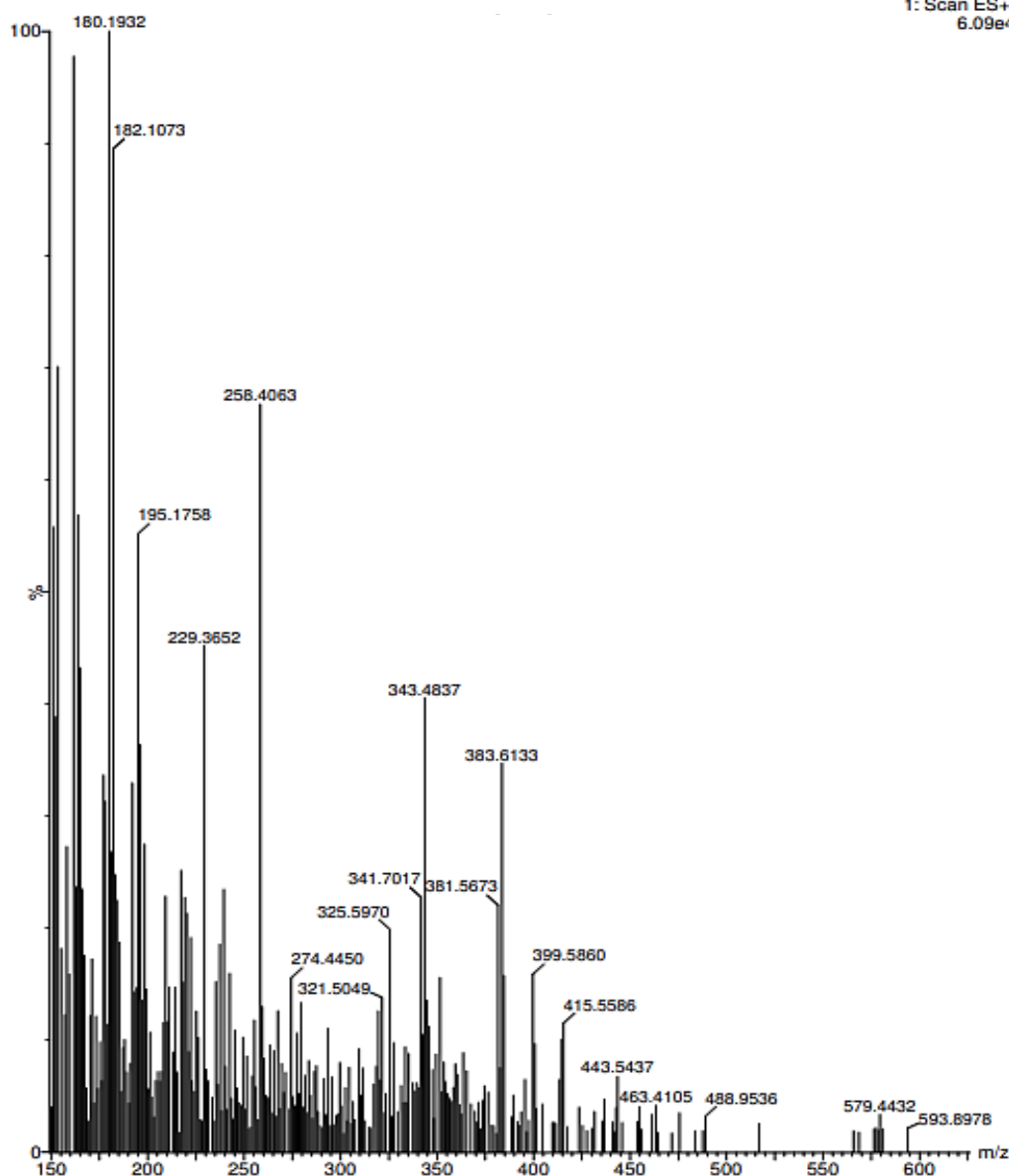
Product Name: Butylated hydroxyanisole

Product Code: PSR37687

BUTYLATED HYDROXYANISOLE

18-Jun-2025 11:15:11

1: Scan ES+
6.09e4



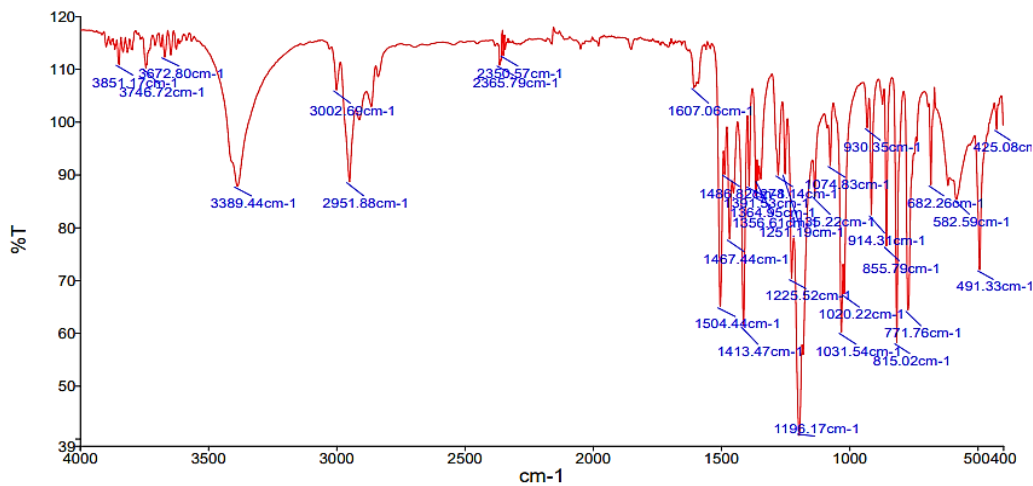
Identification by GC-MS: Conforms to molecular mass

Infrared spectrum:

Product Name: Butylated hydroxyanisole

Product Code: PSR37687

Analyst
Date



AR2500819-Butyrtated hydroxyanisole-B37687S0525 Sample 005 By Analyst Date Wednesday, June 18 2025

Source Spectra Results		
Spectrum Name		Number Of Peaks
AR2500819-Butyrtated hydroxyanisole_1		56
List of Peak Area/Height		
Peak Number	X (cm-1)	Y (%T)
1	3901.61	114.34
2	3867.39	113.81
3	3851.17	110.97
4	3835.49	113.31
5	3818.58	113.24
6	3799.71	113.73
7	3746.72	110.32
8	3710.84	114.59
9	3687.03	114.35
10	3672.80	112.35
11	3649.80	112.78
12	3627.14	113.91
13	3588.59	115.55
14	3389.44	87.90
15	3002.69	106.12
16	2951.88	88.73
17	2913.50	100.49
18	2866.28	103.01
19	2840.10	108.66
20	2365.79	110.81
21	2350.57	112.69
22	2343.88	113.86
23	2049.53	113.92
24	1979.43	114.49
25	1852.05	113.86
26	1707.59	114.26
27	1607.06	106.57
28	1504.44	65.04
29	1486.82	90.16
30	1467.44	77.88
31	1452.26	86.57
32	1413.47	61.42
33	1391.53	87.92
34	1364.95	86.02
35	1356.61	88.98
36	1346.38	89.25
37	1278.14	90.00
38	1251.19	90.21
39	1225.52	70.36
40	1196.17	40.60
41	1181.10	55.94
42	1135.22	85.94
43	1074.83	91.79
44	1031.54	60.22
45	1020.22	67.50
46	930.35	98.99
47	914.31	82.47
48	870.78	103.41
49	855.79	76.56
50	815.02	58.24
51	771.76	64.39
52	682.26	88.15
53	615.59	88.04
54	582.59	85.38
55	491.33	72.06
56	425.08	98.66

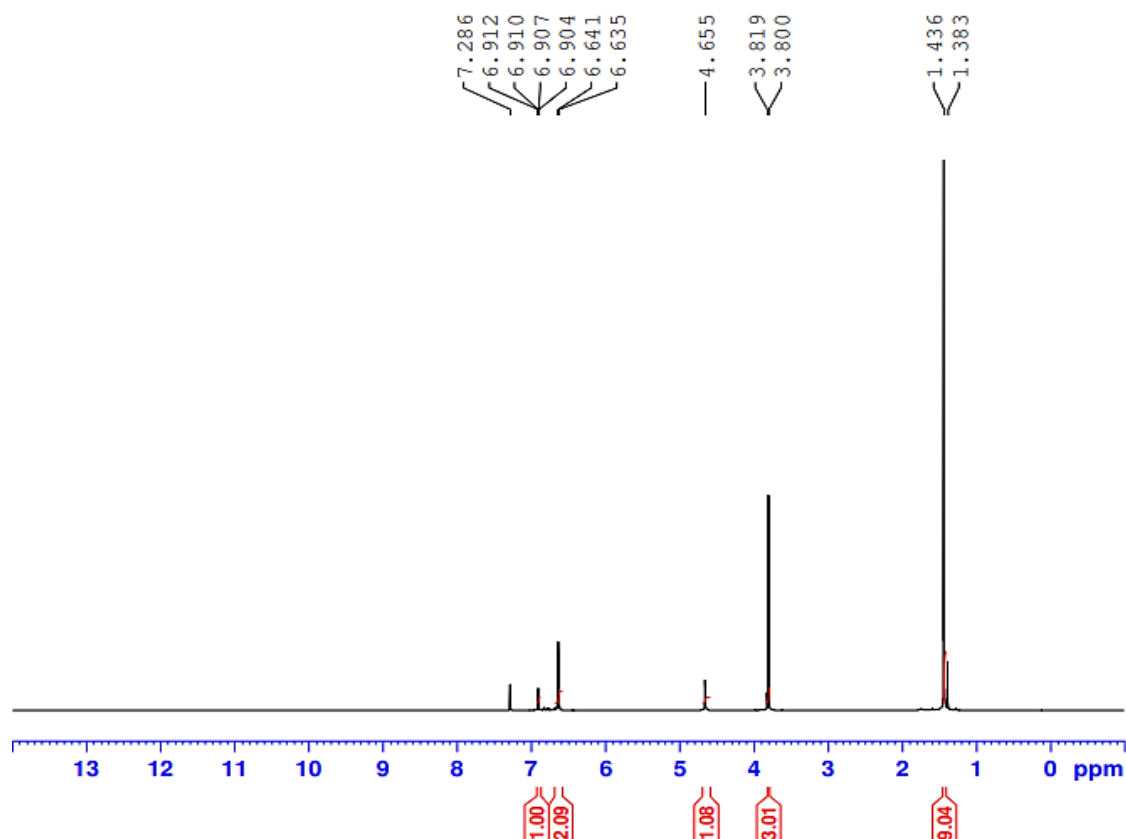
Identification by IR: Conforms to structure

¹H NMR Spectrum:

Product Name: Butylated hydroxyanisole

Product Code: PSR37687

Butylated Hydroxyanisole
Batch no-B37687S0525
¹H-NMR in CDCl₃



Identification by ¹H NMR: Conforms to structure

Maximum limits of impurities

WATER DETERMINATION

Method: Karl Fisher titration

Water Content (PSR37687) = **0.140 %**

Approved By
Head - Technical

This is a computer-generated report -does not required sign