

Certificate of Analysis

2,6-Dimethylphenol

PurCert Standard for GC

Product Number	PSR44171	CAS No.	576-26-1
Brand	PureSynth	Lot No.	D44171T0625
Molecular Formula	C ₈ H ₁₀ O	Date of Mfg.	June,2025
Molecular Weight	122.17 g/mol	Date of Exp.	May,2030

Test	Specification	Result
Description	White to Almost white powder to lump	White crystal
Assay (GC-FID)	≥ 99.0 %	99.86 %
Water (By KF)	NMT 0.500 %	0.361 %
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 a temperature of 2-8°C 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:

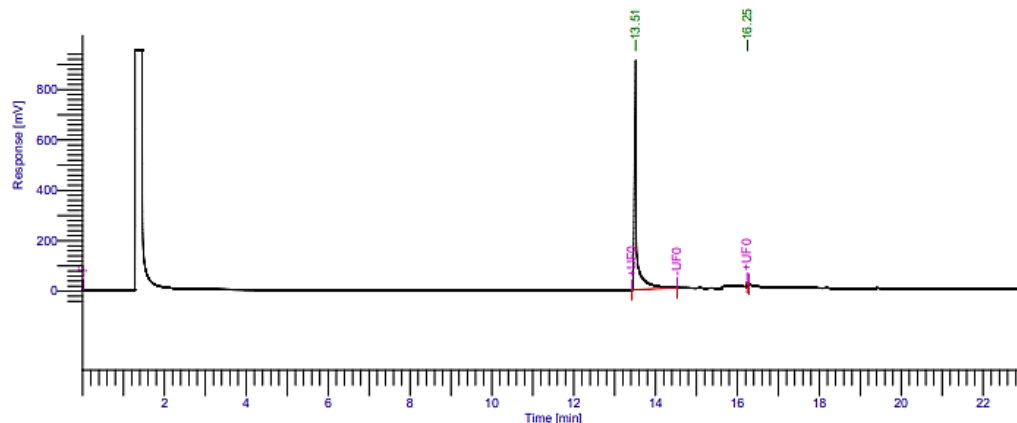
Column: Agilent Technologies DB-FFAP 30mx 0.530mm, 1.0micron

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	: 15-07-2025 10:52:51
Operator	: manager	Sample Name	: 2_6-DIMETHYLPHENOL
Sample Number	: 001	Study	:
AutoSampler	: BUILT-IN	Rack/Vial	: 0/32
Instrument Name	: Clarus 690	Channel	: A
Instrument Serial #	: None	A/D mV Range	: 1000
Delay Time	: 0.00 min	End Time	: 23.00 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	: 14-07-2025 15:42:23	Cycle	: 1



GC Reports

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Area [%]
1		13.513	3517531.81	908917.42	99.86
2		16.247	4950.61	3323.57	0.14
			3522482.41	912240.99	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: 99.86 %

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

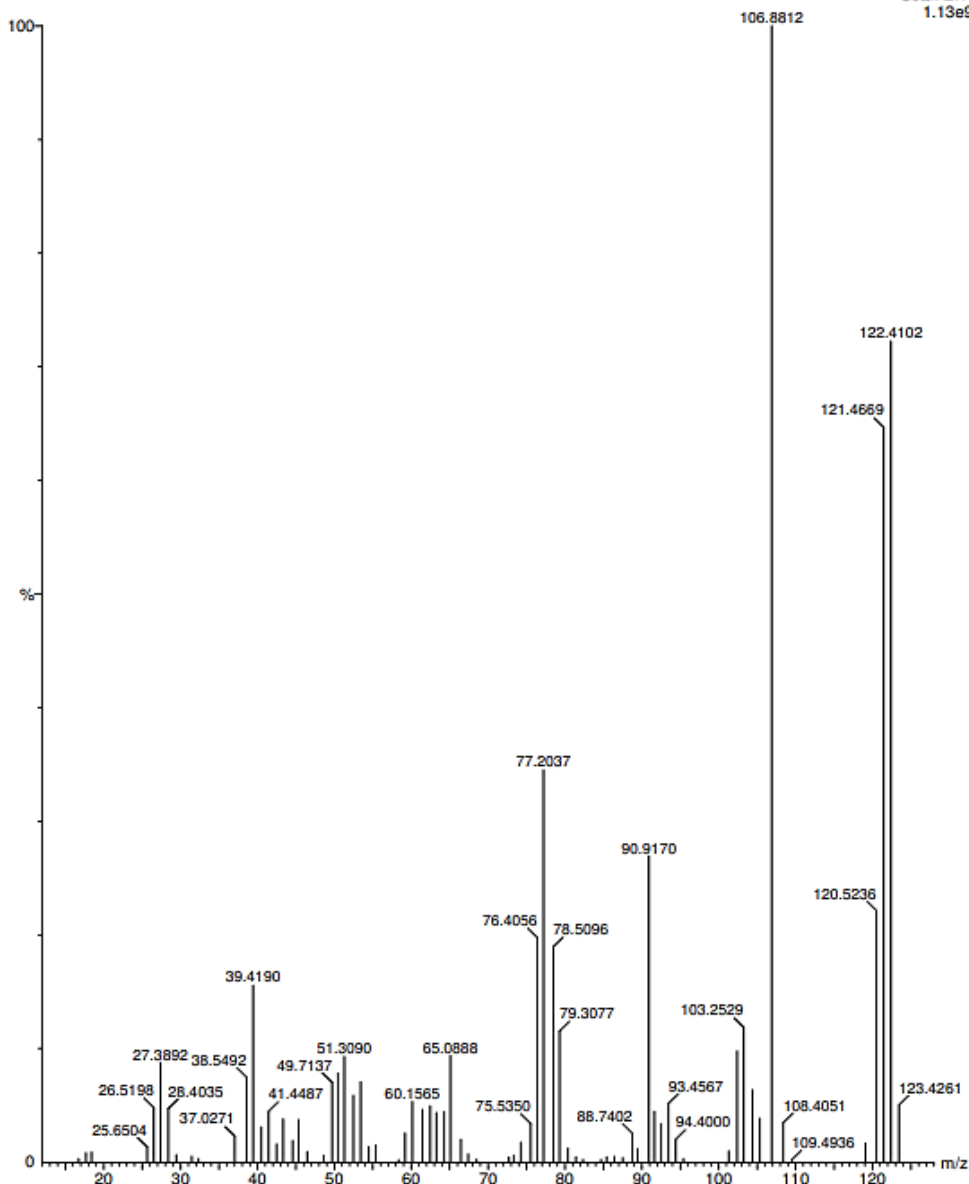
Mass by GC-MS:

Product Name: 2,6-Dimethylphenol

Product Code: PSR44171

2_6-DIMETHYL PHENOL-D44171T0625

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Scan EI+
1.13e9



Identification by GC-MS: Conforms to molecular mass

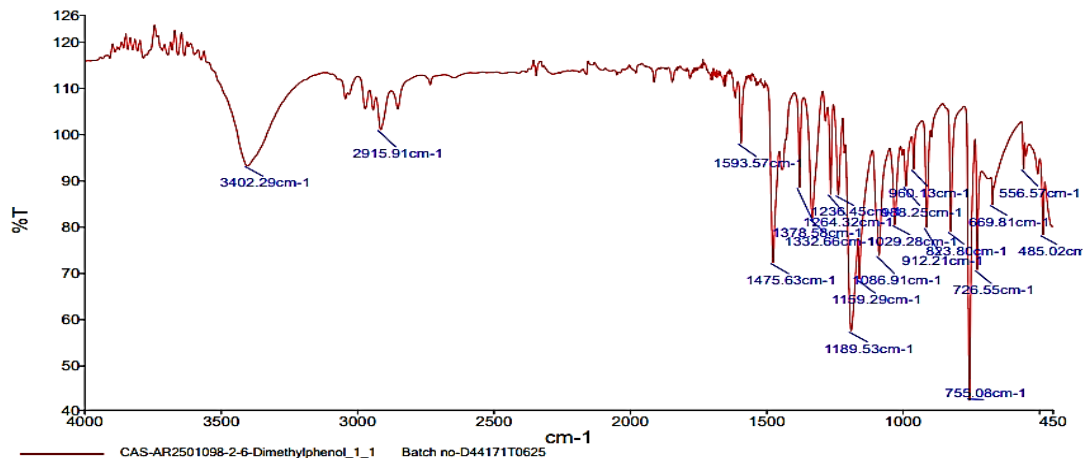
Infrared spectrum:

Product Name: 2,6-Dimethylphenol

Product Code: PSR44171

Analyst
Date

Analyst
15 July 2025 12:04



Source Spectra Results		
Spectrum Name	Number Of Peaks	
CAS-AR2501098-2-6-Dimethylphenol_1_1	61	
List of Peak Area/Height		
Peak Number	X (cm-1)	Y (%T)
1	3891.82	118.00
2	3859.95	118.80
3	3844.43	118.53
4	3827.17	118.43
5	3808.33	118.18
6	3786.60	116.68
7	3717.54	118.31
8	3697.10	117.33
9	3681.59	118.34
10	3660.83	117.33
11	3636.66	117.20
12	3574.58	116.26
13	3402.29	93.30
14	3045.88	107.84
15	2973.25	105.71
16	2943.92	105.36
17	2915.91	101.13
18	2853.47	105.61
19	2734.40	110.88
20	2344.98	112.86
21	2161.29	113.06
22	2049.45	113.01
23	1979.40	113.43
24	1912.24	111.44
25	1846.08	111.43
26	1781.47	112.27
27	1702.96	111.98
28	1698.00	112.03
29	1686.99	112.62
30	1681.76	112.46
31	1655.31	110.52
32	1650.55	110.68
33	1614.29	108.02
34	1593.57	98.15
35	1536.98	110.69
36	1509.07	110.18
37	1475.63	72.38
38	1444.36	92.51
39	1378.58	88.62
40	1332.66	81.92
41	1283.76	103.01
42	1264.32	87.16
43	1236.45	86.98
44	1214.31	96.08
45	1189.53	57.54
46	1159.29	68.73
47	1086.91	73.91
48	1029.28	80.56
49	1001.96	95.55
50	988.25	88.87
51	960.13	92.63
52	912.21	79.96
53	893.97	99.51
54	823.80	79.07
55	755.08	42.47
56	726.55	70.81
57	669.81	84.87
58	556.57	92.61
59	547.40	95.49
60	504.18	91.57
61	485.02	78.35

Identification by IR: Conforms to structure

PureSynth Research Chemicals GmbH, 64683 Einhausen Marie-Curie-StraBe. 3, Germany

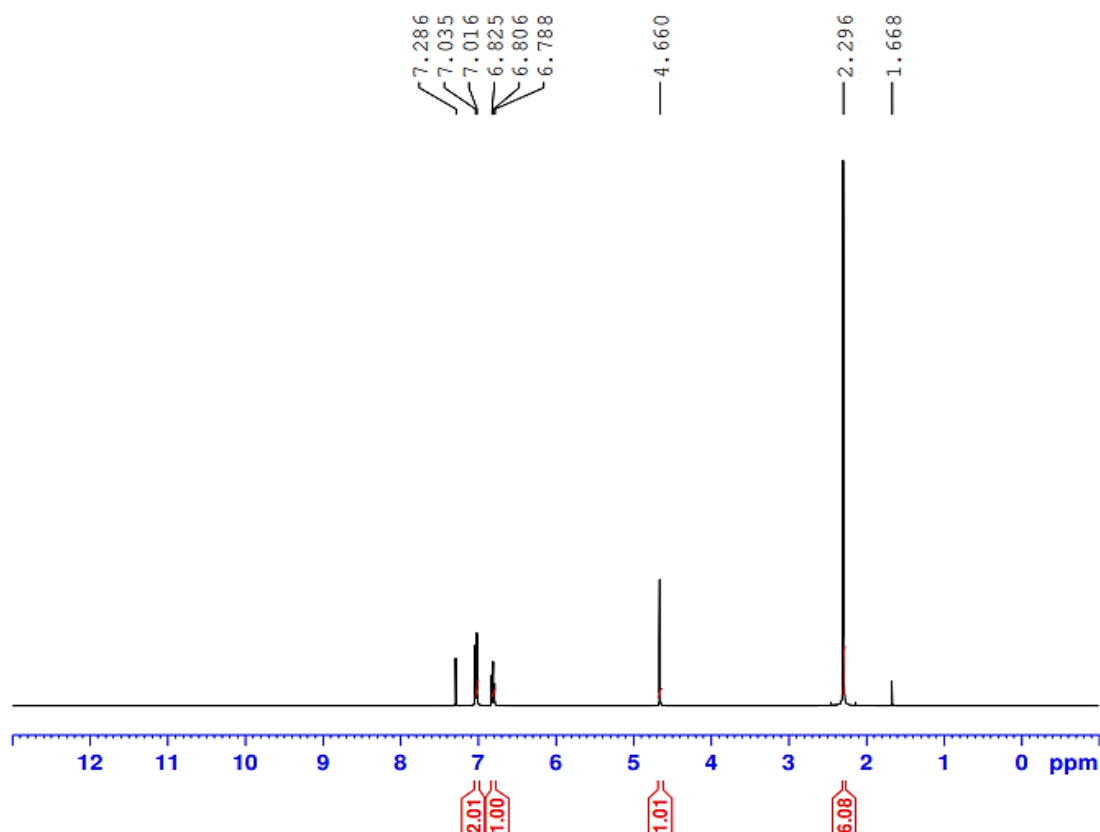
☎: 1800-8908-260, ✉: info@pure-synth.com, 🌐: www.pure-synth.com

¹H NMR Spectrum:

Product Name: 2,6-Dimethylphenol

Product Code: PSR44171

2,6-Dimethylphenol
B.No-D44171T0625
¹H-NMR in CDCl₃



Identification by ¹H NMR: Conforms to structure

Maximum limits of impurities

WATER DETERMINATION

Method: Karl Fisher titration

Water Content (PSR44171) = **0.361 %**

Approved By
Head - Technical

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