

Certificate of Analysis

Benzyl alcohol

PurCert Standard for GC

(Secondary Reference Standard)

Product Number	PSR28386	CAS No.	100-51-6
Brand	PureSynth	Lot No.	B28386P0225
Molecular Formula	C ₇ H ₈ O	Date of Mfg.	February,2025
Molecular Weight	108.14 g/mol	Date of Exp.	January,2028

Test	Specification	Result
Description	Colorless liquid	Colorless liquid
Assay (GC-FID)	≥ 99.5 %	99.98 %
Water (By KF)	NMT 0.200 %	0.108 %
Density	1.040-1.050 g/cm ³	1.045 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 USP Reference Standard 1061901, Lot no: R097X0**

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.

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

Toll free no. 1800-8908-260, Email: info@pure-synth.com , Website: www.pure-synth.com

Assay by GC-FID

METHOD: GC- FID conditions:

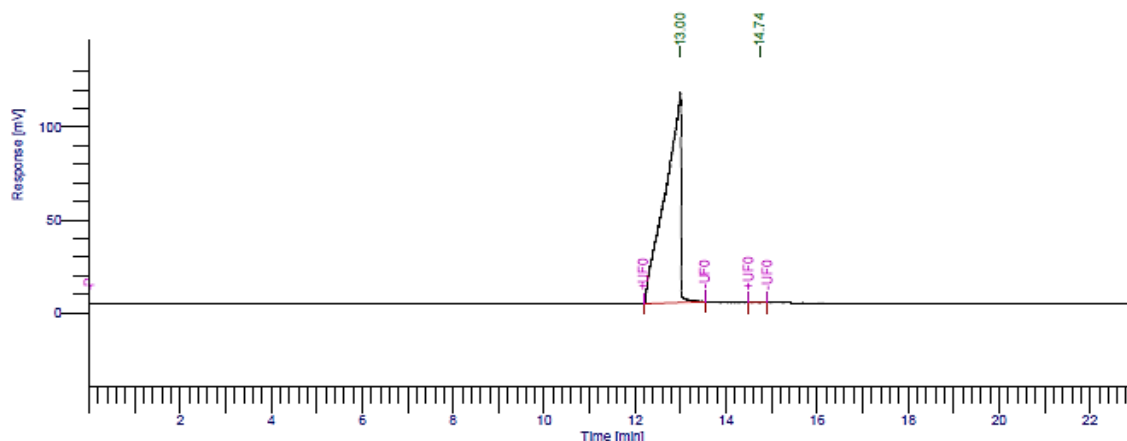
Column: Agilent Technologies DB-FFAP 30mx 0.530mm, 1.0micron

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	: 15-03-2025 10:24:42
Operator	: manager	Sample Name	: BENZYL ALCOHOL
Sample Number	: 001	Study	:
AutoSampler	: BUILT-IN	Rack/Vial	: 0/14
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	: 15-03-2025 09:48:53	Cycle	: 1



GC Reports

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Area [%]
1		12.997	2652296.11	113086.53	99.98
2		14.739	418.25	32.48	0.02
			2652714.35	113119.01	100.00

Missing Component Report
Component Expected Retention (Calibration File)

All components were found

Purity by GC-FID: 99.98 %

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

Toll free no. 1800-8908-260, Email: info@pure-synth.com , Website: www.pure-synth.com

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

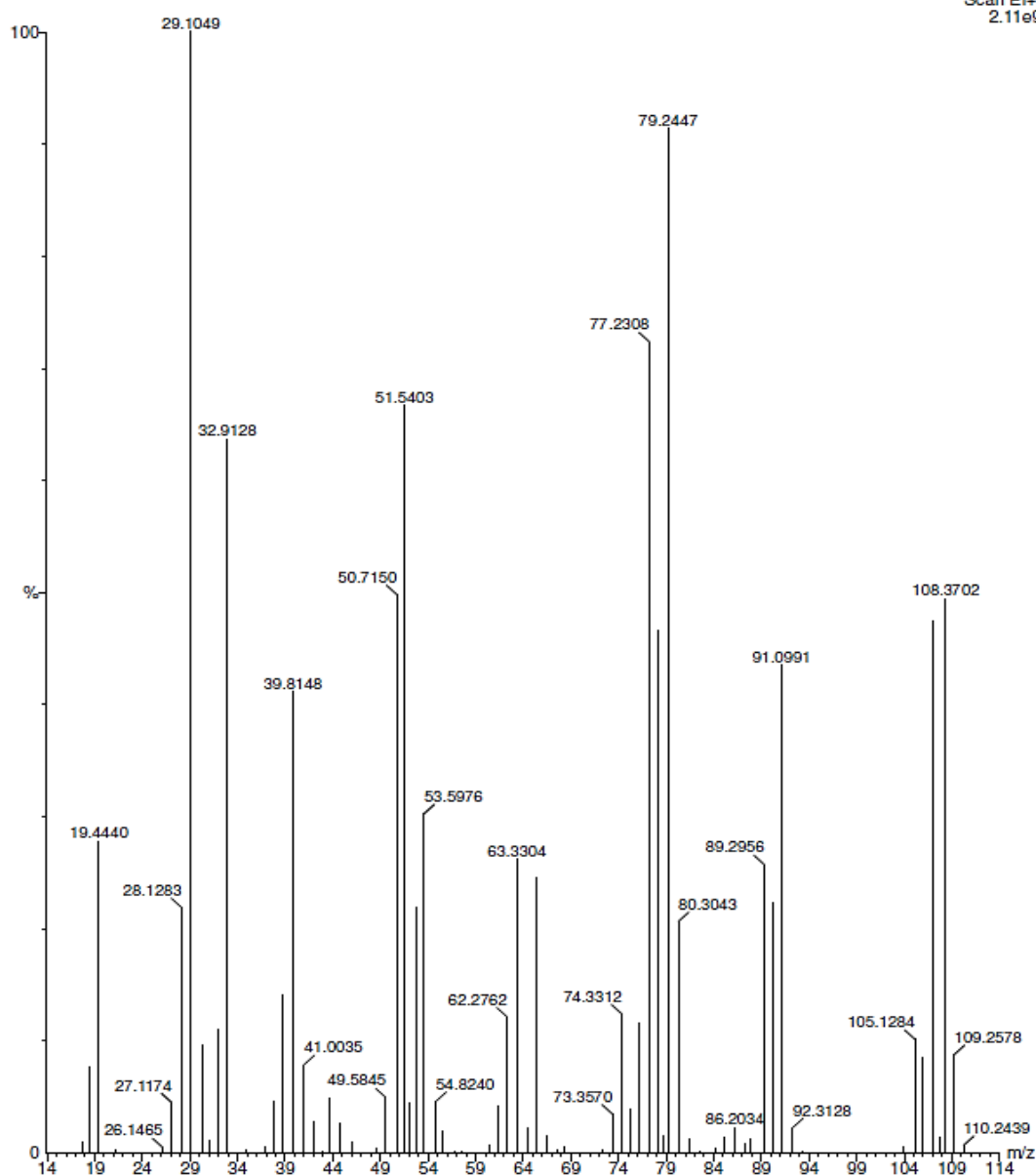
Mass by GC-MS:

Product Name: Benzyl alcohol

Product Code: PSR28386

BENZYL ALCOHOL

, 15-Mar-2025 + 10:14:10
Scan EI+
2.11e9



Identification by GC-MS: Conforms to molecular mass

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

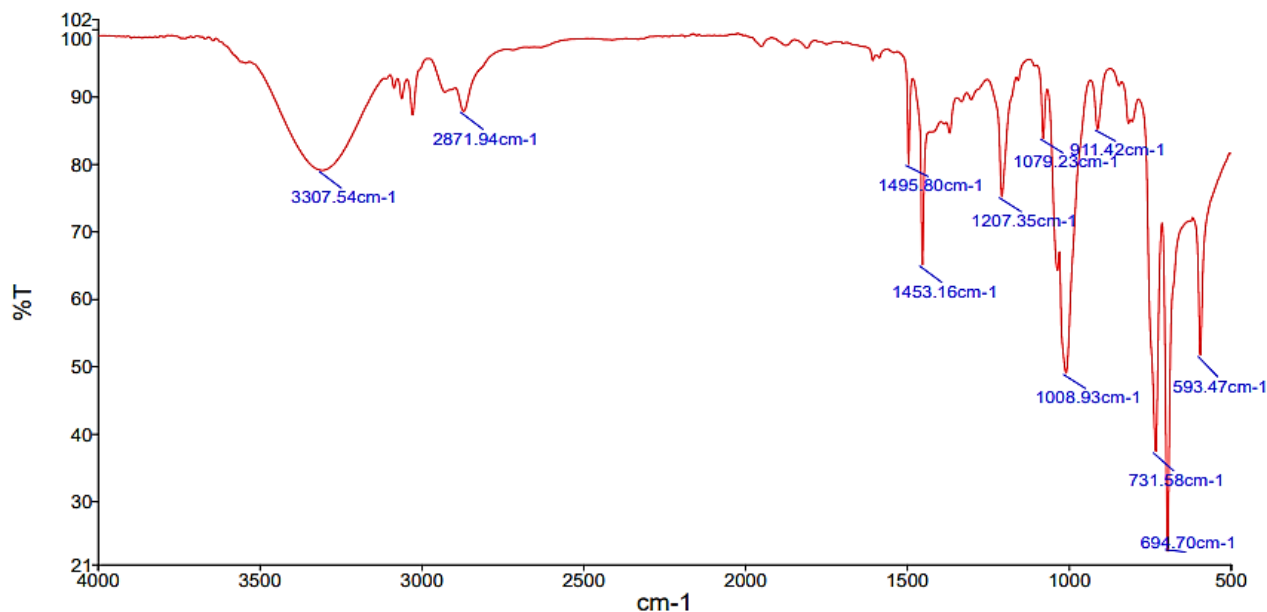
Toll free no. 1800-8908-260, Email: info@pure-synth.com, Website: www.pure-synth.com

Infrared spectrum:

Product Name: Benzyl alcohol

Product Code: PSR28386

Analyst
Date



AR25000291-Benzyl alcohol_1 Batch no-B28386P0225

Source Spectra Results		
Spectrum Name		Number Of Peaks
AR25000291-Benzyl alcohol_1		21
List of Peak Area/Height		
Peak Number	X (cm-1)	Y (%T)
1	3307.54	79.18
2	3087.39	91.38
3	3063.48	89.83
4	3029.75	87.42
5	2871.94	87.95
6	1950.99	97.60
7	1810.20	97.34
8	1606.49	95.49
9	1495.80	80.06
10	1453.16	65.16
11	1368.84	84.74
12	1302.32	89.68
13	1207.35	75.27
14	1079.23	83.96
15	1035.19	64.31
16	1008.93	49.06
17	911.42	85.30
18	815.78	86.15
19	731.58	37.44
20	694.70	22.58
21	593.47	51.73

Identification by IR: Conforms to structure

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

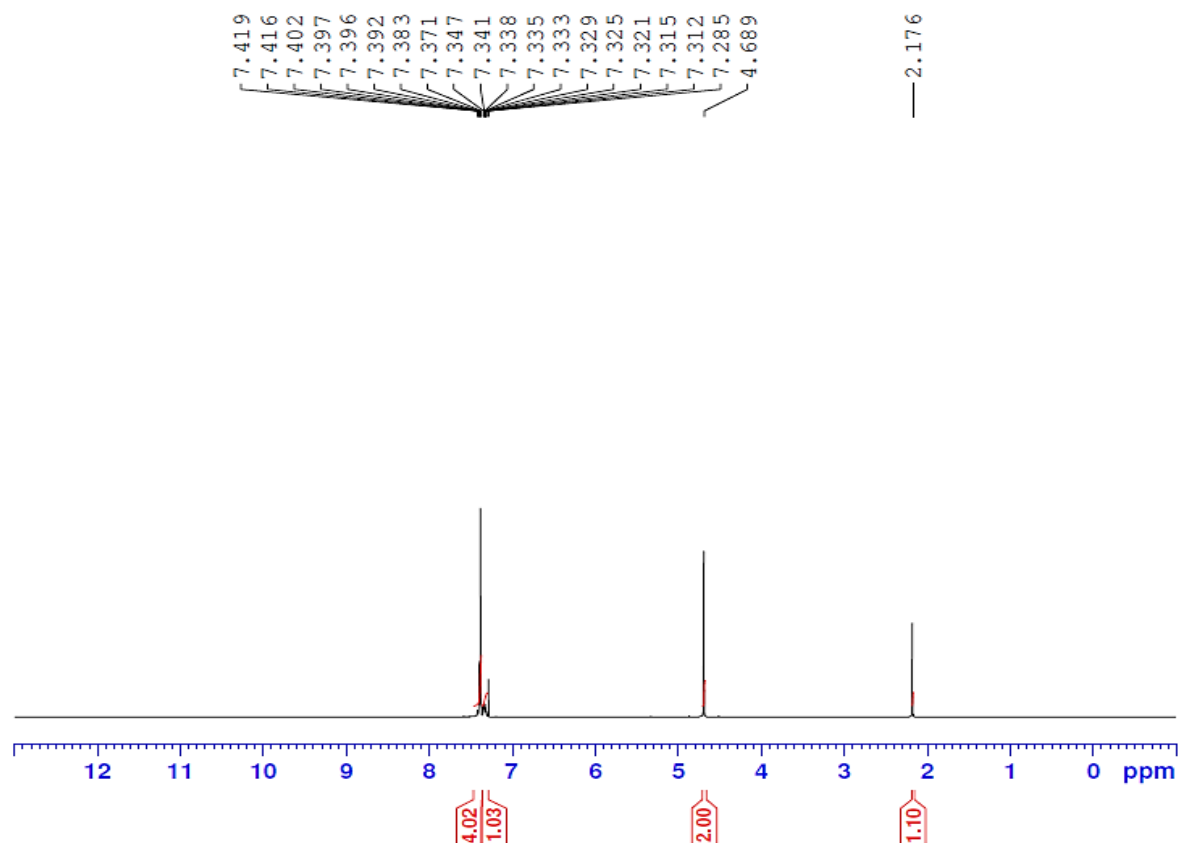
Toll free no. 1800-8908-260, Email: info@pure-synth.com , Website: www.pure-synth.com

¹H NMR Spectrum:

Product Name: Benzyl alcohol

Product Code: PSR28386

Benzyl alcohol
B.No : B28386P0225
¹H-NMR in CDCl₃



Identification by ¹H NMR: Conforms to structure

Maximum limits of impurities

WATER DETERMINATION

Method: Karl Fisher titration

Water Content (PSR28386) = **0.108 %**

Approved By
Head - Technical