

CERTIFICATE OF ANALYSIS

Product Name	Isobutyl Alcohol. Analytical standard		
Synonyms	2-Methyl-1-propanol, Isobutanol		
CAS No	78-83-1		
Product code	SYI0045	Batch No	LISBF0105
Molecular Formula	C ₄ H ₁₀ O	Molecular Weight	74.12
Mfg. Date	Jan-26	Expiry Date	Dec-28
Storage Conditions	Store at room temperature, tightly closed container		

Test	Specification	Results
Description	clear colorless liquid	clear colorless liquid
Boiling Point	108 °C	108 °C
Specific Gravity at 20°C	0.802 g/ml	0.802 g/ml
Purity by GC	≥99.00%	99.97
IR Spectrum	Identification by structure	Confirmed
¹H NMR Spectra	Identification by structure	Confirmed
Mass Spectra	Identification by molecular weight	Confirmed

Reference to *USP 30-NF 25* General Chapter <11>, "Reference Standards," As a result, noncompendial (secondary) reference standards require characterization data. This product should not use for clinical application.

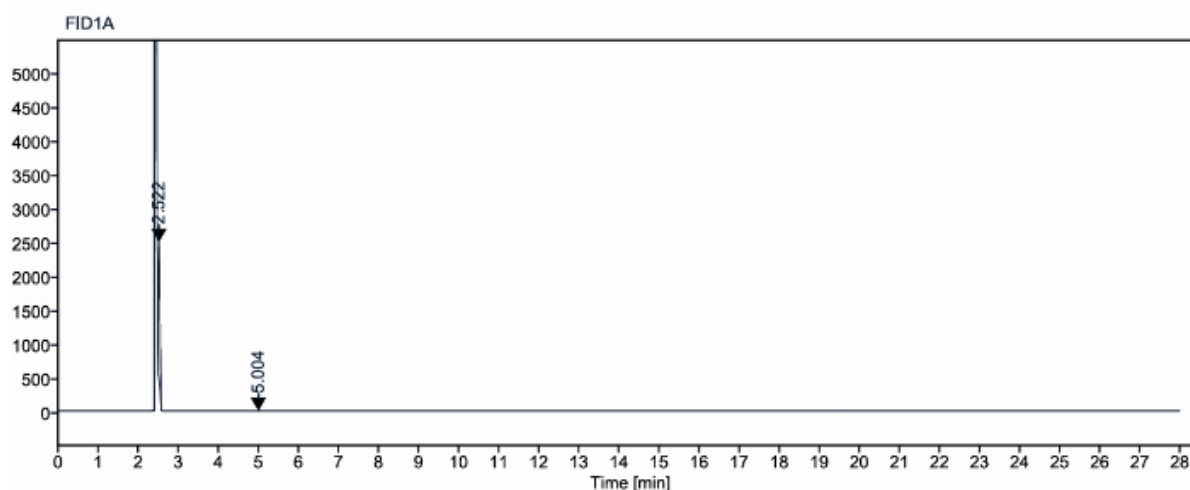
Approved by
Dr. Gopinath PH. D



Computer Generated document, Does not require any Signature.

ANALYTICAL GC REPORT

Data file: LISBF0105.dx
Method Name: HP-5-GENERAL-METHOD.amx
Sample Name: LISBF0105
Injection Acquired Date: 2026-01-09 08:12:17+05:30
Injection Processed Date: 2026-01-09 10:19:03+05:30
Inj. volume: 0.500 µL
Vial Number: 104
Data File Directory: /2026/JAN-2026/Results/09012026/20260109 074028002.rslt
Injection Column Name: HP-5
Instrument ID: SA/AD/INS/037



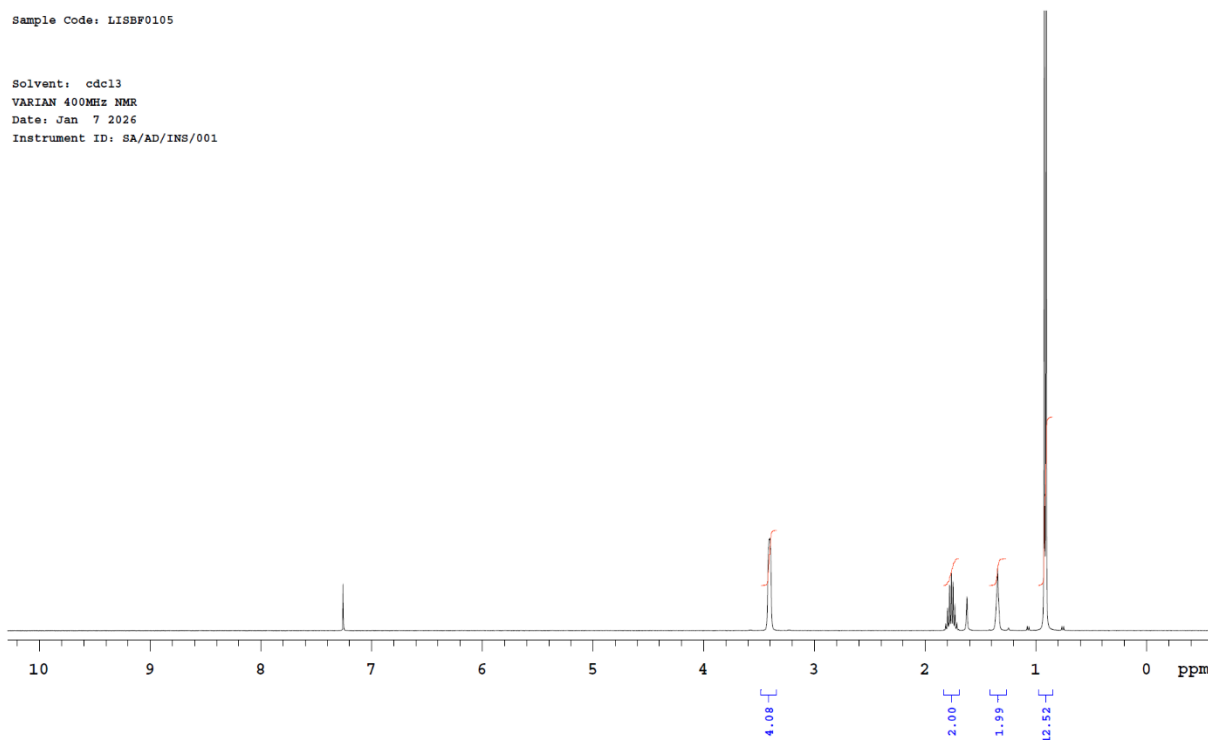
RT[MIN]	AREA	AREA %
2.522	5310.650	99.97
5.004	1.411	0.03



Identification by NMR: H1NMR

Sample Code: LISBF0105

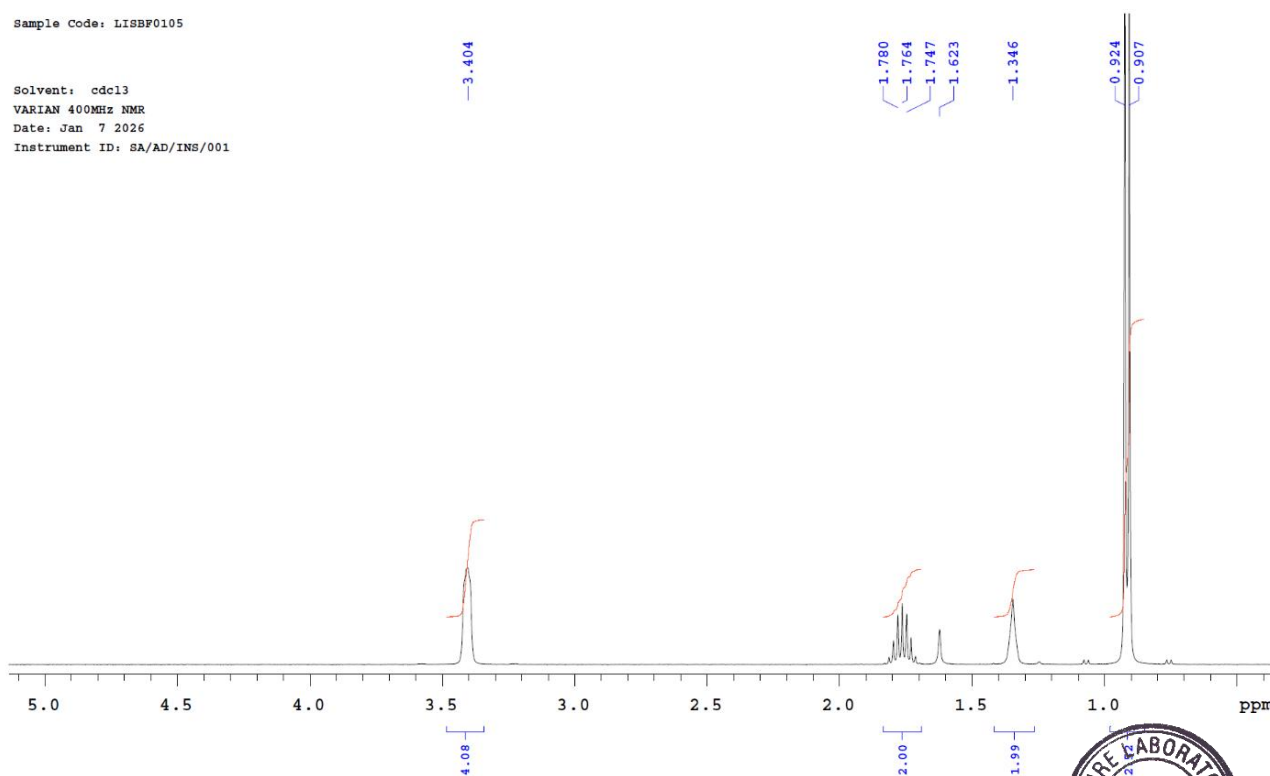
Solvent: cdcl3
 VARIAN 400MHz NMR
 Date: Jan 7 2026
 Instrument ID: SA/AD/INS/001



Plotname: LISBF0105_PROTON_20260107_01_plot01

Sample Code: LISBF0105

Solvent: cdcl3
 VARIAN 400MHz NMR
 Date: Jan 7 2026
 Instrument ID: SA/AD/INS/001



Plotname: LISBF0105_PROTON_20260107_01_plot02



Identification by NMR: H1NMR

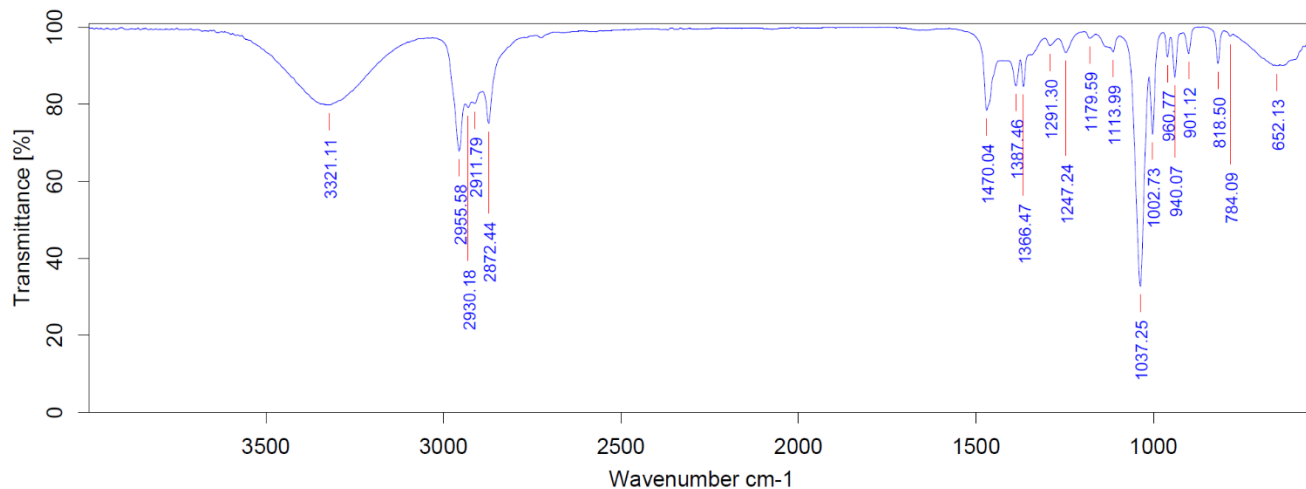
				INDEX	FREQUENCY	PPM	HEIGHT
exp1	PROTON			1	2900.7	7.257	10.1
				2	1360.5	3.404	20.4
				3	711.6	1.780	10.1
				4	705.0	1.764	12.9
				5	698.5	1.747	10.6
				6	648.7	1.623	7.3
				7	538.0	1.346	13.7
				8	369.2	0.924	166.0
				9	362.4	0.907	158.5

SAMPLE		PRESATURATION	
date	Jan 7 2026	satmode	n
solvent	cdc13	wet	n
file	/home/varian/~	SPECIAL	
data/2026/Jan/LISB~	temp	not used	
F0105_20260107_01/~	gain	48	
LISBF0105_PROTON_2~	spin	0	
0260107_01.fid	hst	0.008	
ACQUISITION	pw90	13.000	
sw	7183.9	alfa	10.000
at	4.000	FLAGS	
np	57472	il	n
fb	4000	in	n
bs	2	dp	y
d1	1.000	hs	nn
nt	128	PROCESSING	
ct	14	lb	0.50
TRANSMITTER	fn	not used	
tn	H1	DISPLAY	
sfrq	399.689	sp	-793.9
tof	799.4	wp	7183.7
tpwr	59	rfl	794.1
pw	6.500	rfp	0
DECOUPLER	rp	-137.2	
dn	C13	lp	0
dof	0	PLOT	
dm	nnn	wc	268
decwave	W40_GATB-0~	sc	0
	12	vs	52
dpwr	35	th	7
dmf	29412	ai cdc ph	

Plotname: LISBF0105_PROTON_20260107_01_plot03



Identification by Infrared Spectroscopy (IR)



Path/File Name:D:\2026\JAN-2026\LIBSF0105.0

Sample Name:LIBSF0105

Experiment:JANUARY-2026.XPM

Lot No./Batch No:LIBSF0105

Resolution:2

Date & Time:1/7/2026,6:12:45 PM

Sample Scans:32

Operator Name:SPARK

Frequency Range:4000 to 550

- [-] "D:\2026\JAN-2026\LIBSF0105.0" 1
- [-] Peak Table TR
 - ... Peak Picking

Peak Picking	Values
Method:	Standard
Searched for minima:	Yes
Number of peaks:	20
Sensitivity > [%]:	10.000000
From:	4000.000000
to:	400.000000
Absolute peak height >	0.000000
Relative peak height < [%]	0.000000
Absolute peak height <	0.000000

Wavenumber	Abs. intensity	Rel. intensity	Width	Found if threshold <	Shoulder
3321.1144	0.799	0.183	245.6237	25.867579	0
2955.5782	0.679	0.321	111.7405	47.577484	0
2872.4373	0.750	0.086	11.7383	12.312188	0
1470.0439	0.785	0.210	31.7499	30.371450	0
1366.4689	0.846	0.074	8.7440	10.403830	0
1037.2505	0.327	0.674	28.6661	99.930229	0
1002.7272	0.722	0.157	9.5136	22.110565	0
940.0671	0.870	0.120	11.0093	17.250219	0
818.4985	0.906	0.088	10.1759	12.583883	0
652.1253	0.900	0.086	134.6404	11.755033	0
2930.1786	0.792	0.014	45.6608	2.986129	0
2911.7940	0.802	0.011	69.0942	1.575788	0
1387.4602	0.848	0.067	13.8093	53.044102	0
1291.3004	0.953	0.018	17.9205	27.639124	0
1247.2353	0.934	0.046	23.3338	67.701500	0
1179.5897	0.972	0.014	1.9892	19.231108	0
1113.9860	0.936	0.043	32.8746	7.157703	0
960.7653	0.924	0.056	8.2959	12.921990	0
901.1161	0.932	0.058	11.9095	41.733768	0
784.0905	0.977	0.008	7.0021	5.310346	0



Identification by Mass spectrometry (MS)