

Certificate of Analysis

Isopropyl acetate

PurTech Standard for GC

(Secondary Reference Standard)

Product Number	PSI053	CAS No.	108-21-4
Brand	Puresynth	Lot No.	B10B
Molecular Formula	C ₅ H ₁₀ O ₂	Date of Mfg.	Sep.2021
Molecular Weight	102.13 g/mol	Date of Exp.	Aug.2025

Test	Specification	Result
Description	Colorless liquid	Colorless liquid
Clarity	Clear	Clear
Assay (GC-FID)	≥99.5%	99.86%
Water (by KF)	≤0.4%	0.3467%
Identification by ¹ H NMR	Conform to structure	Conforms
Identification by GC-MS	Conform to molecular	Conforms
Identification by IR	Conform to structure	Conforms

***Traceable to USP Reference standard 1350104, Current Lot No: F0E225**

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

Worldwide Helpline No. 1800-120-1234-34 , Email: info@pure-synth.com , Website: www.pure-synth.com

Assay by GC-FID

METHOD: G.C- FID conditions:

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

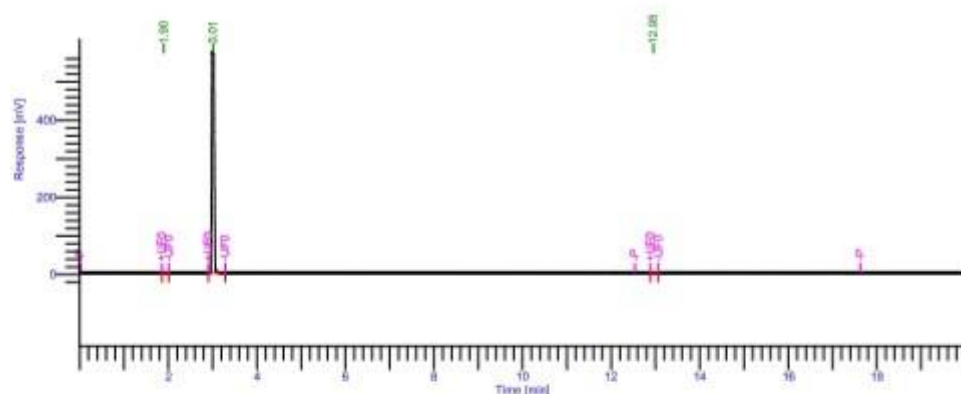
Instrument: PerkinElmer, GC 2014,

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.

Page 1 of 2

Software Version	: 6.3.4.0700	Date	: 02-12-2021 3.33.57 PM
Operator	: manager	Sample Name	: AR21000830-ISOPROPYL ACETATE
Sample Number	: 1	Study	: GC Purity
AutoSampler	: BUILT-IN	Rack/Vial	: 0/6
Instrument Name	: Clarus 680	Channel	: A
Instrument Serial #	: None	A/D mV Range	: 1000
Delay Time	: 0.00 min	End Time	: 20.00 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	: 23-11-2021 2.32.20 PM	Cycle	: 1



GC Reports

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Area [%]
1		1.899	2102.63	667.70	0.08
2		3.009	2690416.70	920990.16	99.86
3		12.955	1794.45	345.15	0.07

Peak #	Component Name	Time [min]	Area [uV*s]	Height	Area
			2694313.78	922003.01	100.00

Missing Component Report

Component Expected Retention (Calibration File)

All components were found

Purity by GC-FID: 99.86%

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

Worldwide Helpline No. 1800-120-1234-34 , Email: info@pure-synth.com , Website: www.pure-synth.com

IDENTIFICATION TESTS

GC-MS Spectrum:

METHOD: G.C-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

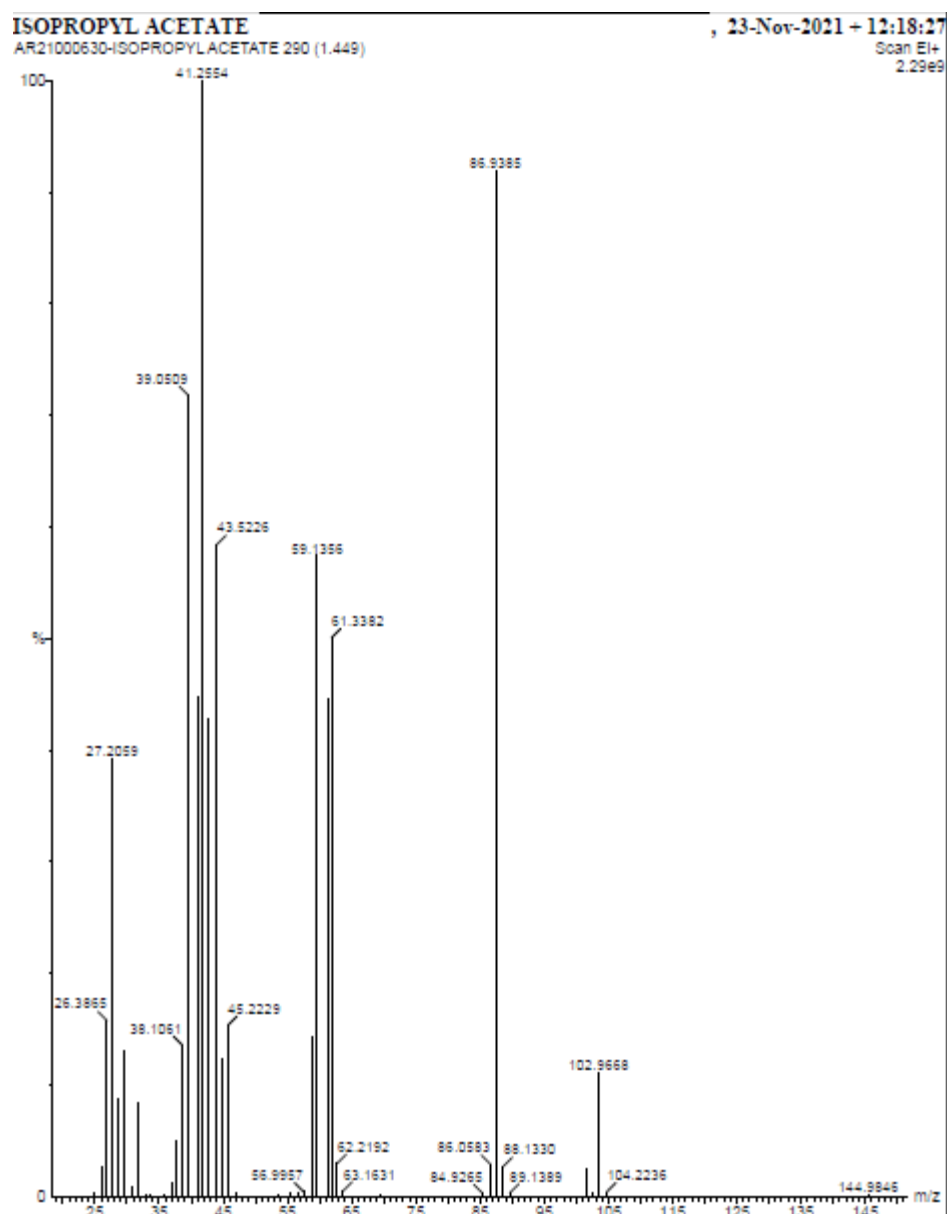
Inlet Temp.: 180°C, **Diluent:** Methanol

Source energy: 70eV

Mass by GC-MS:

Product Name: Isopropyl acetate

Product Code: PSI053



Identification by GC-MS: Conform to molecular

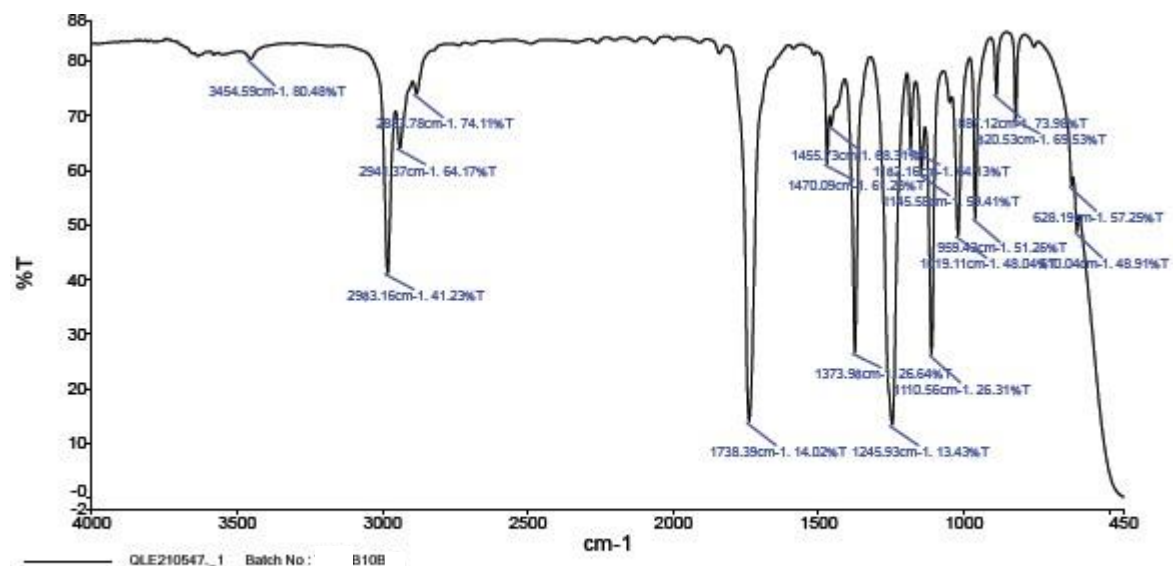
This is a computer-generated report -does not required sign

Worldwide Helpline No. 1800-120-1234-34 , Email: info@pure-synth.com , Website: www.pure-synth.com

Infrared spectrum:

Product Name: Isopropyl acetate

Product Code: PSI053



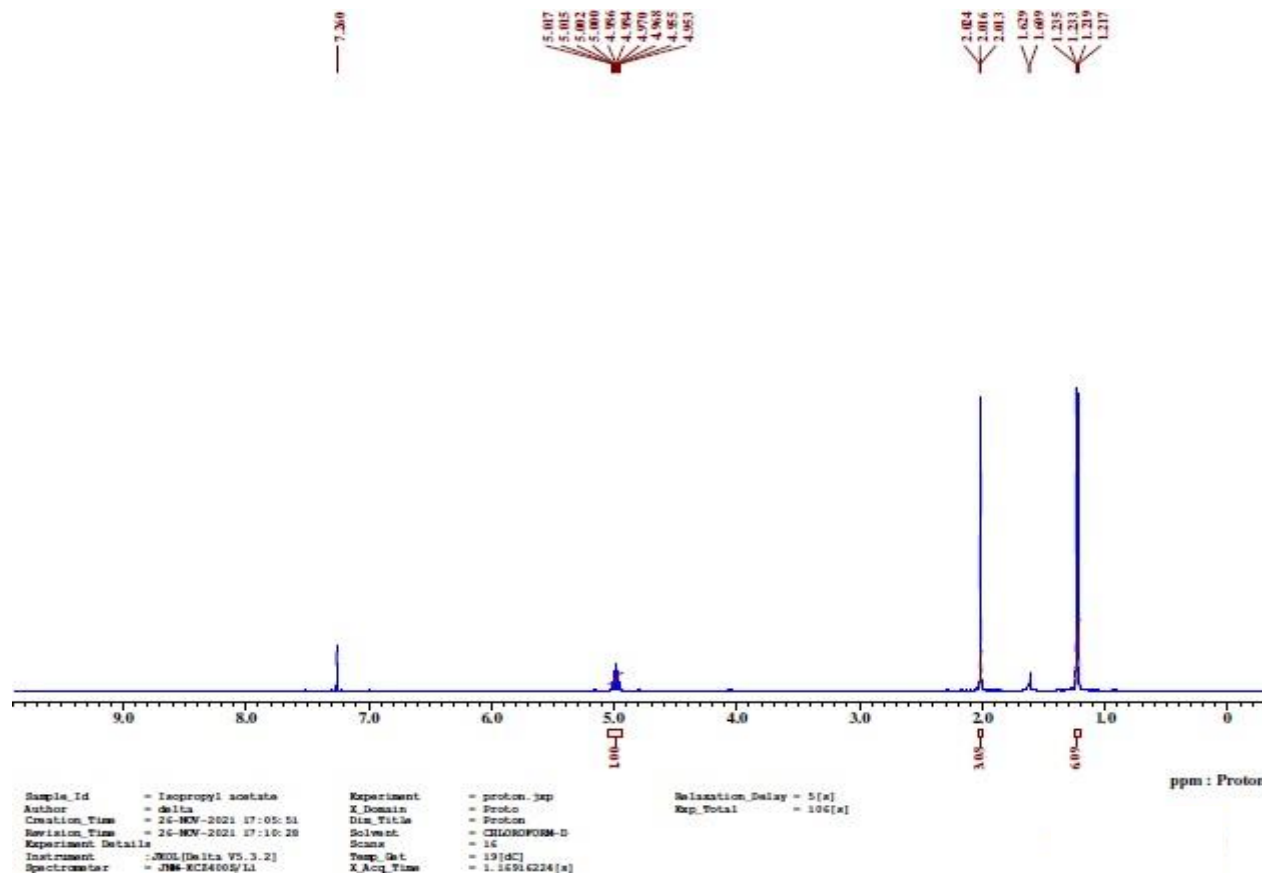
Source Spectra Results		
Spectrum's Name	Number Of Peaks	
QLE210547_1	18	
List of Peak Area/Height		
Peak Number	X (cm-1)	Y (%)
1	3454.59	80.48
2	2983.16	41.23
3	2941.37	64.17
4	2883.78	74.11
5	1738.39	14.02
6	1470.09	61.23
7	1455.73	68.31
8	1373.98	26.64
9	1245.93	13.43
10	1182.16	64.13
11	1145.58	59.41
12	1110.56	26.31
13	1019.11	48.04
14	969.43	51.26
15	887.12	73.98
16	820.53	69.53
17	628.19	57.25
18	610.04	48.91

Identification by IR: Conform to structure

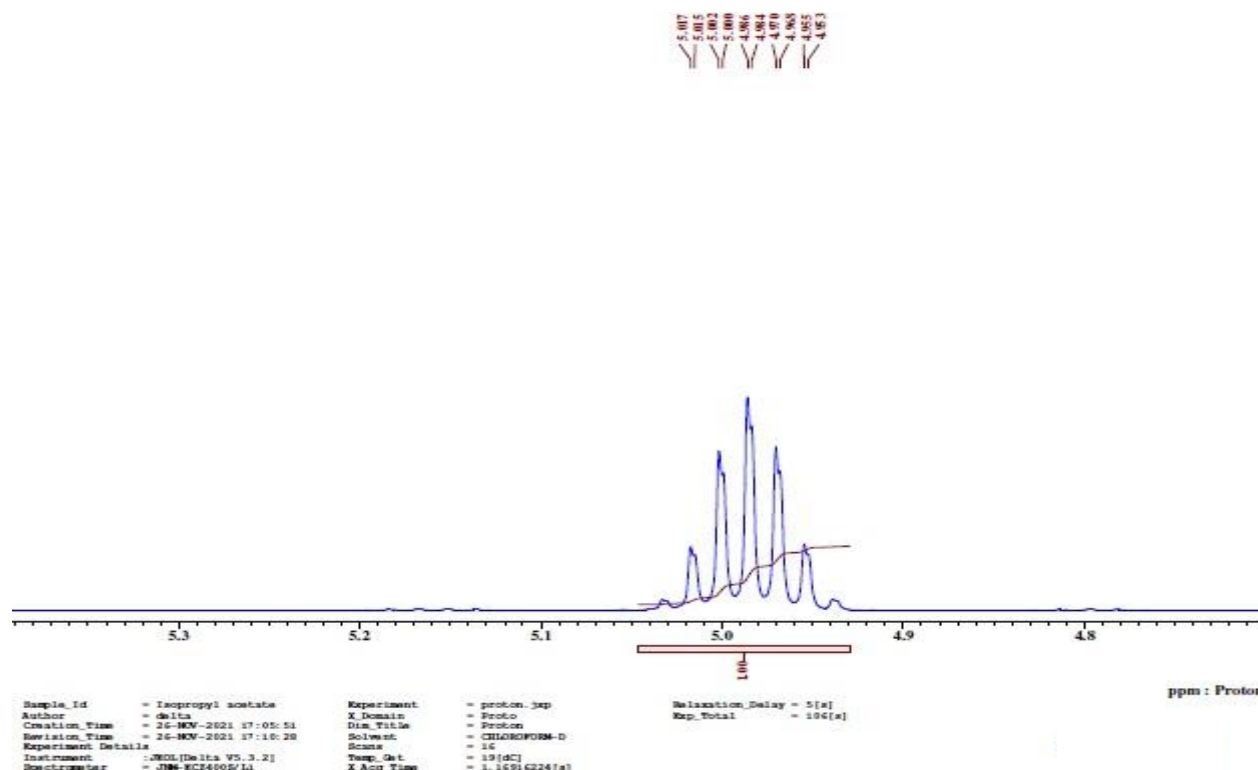
¹H NMR Spectrum:

Product Name: Isopropyl acetate

Product Code: PSI053

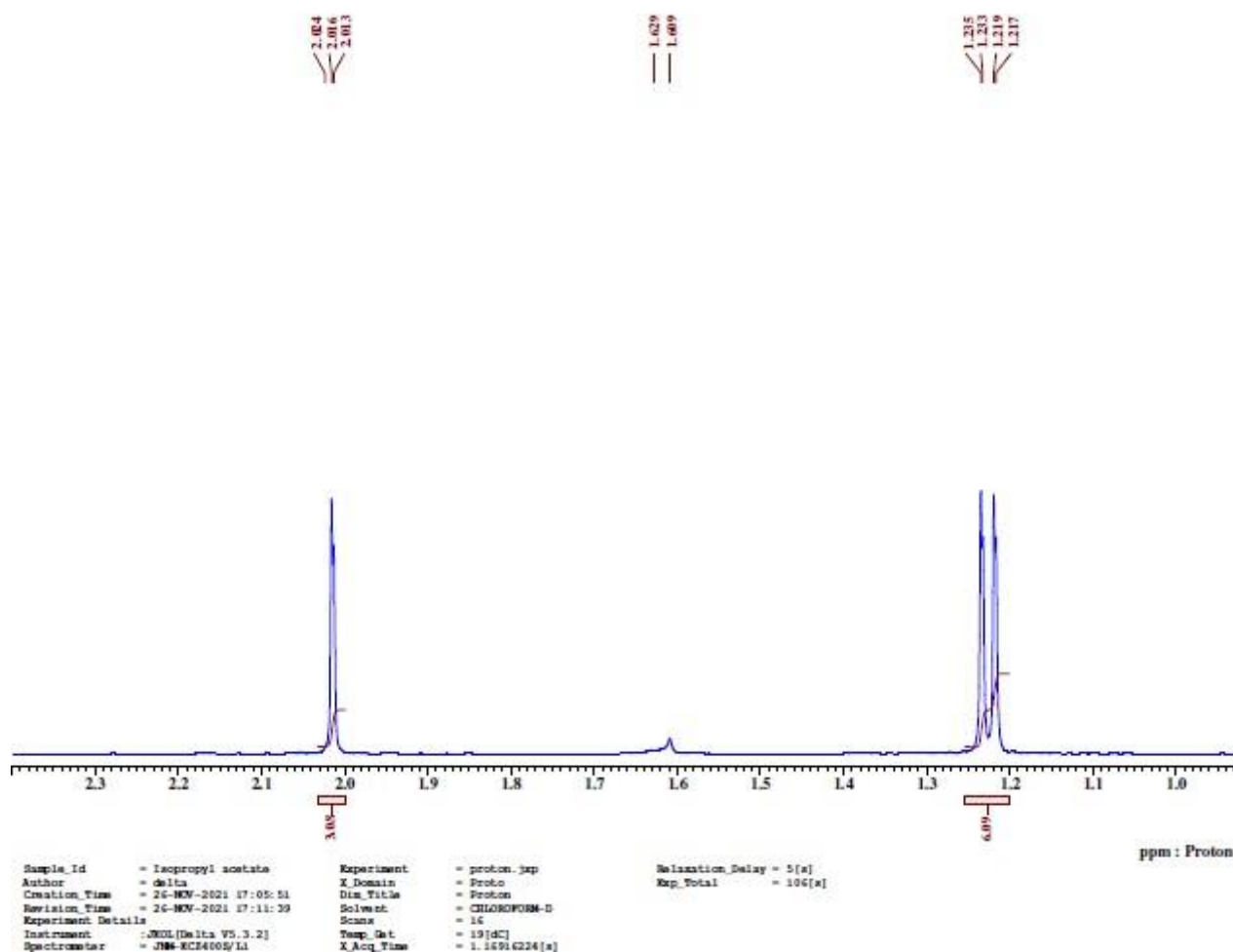


¹H NMR Spectrum: Expansion



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

Worldwide Helpline No. 1800-120-1234-34 , Email: info@pure-synth.com , Website: www.pure-synth.com



Identification by ^1H NMR: Conform to structure

Maximum limits of impurities

WATER DETERMINATION

Method: Karl Fisher titration

Water Content (PSI053) = **0.3467 %**

Approved By
Head - Technical

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

Worldwide Helpline No. 1800-120-1234-34 , Email: info@pure-synth.com , Website: www.pure-synth.com