

Certificate of Analysis

Chloroform

PurCert Standard for GC

(Secondary Reference Standard)

Product Number	PSR28267	CAS No.	67-66-3
Brand	PureSynth	Lot No.	C28267H0324
Molecular Formula	CHCl ₃	Date of Mfg.	March,2024
Molecular Weight	119.38 g/mol	Date of Exp.	February,2027

Test	Specification	Result
Description	Colorless liquid	Colorless liquid
Clarity	Clear	Clear
Assay (GC-FID)	≥ 99.0 %	99.85 %
Water (By KF)	NMT 0.10 %	0.068 %
Density		1.49 g/cm ³
Identification by ¹ H NMR	Conforms to structure	Conforms
Identification by GC-MS	Conform to molecular	Conforms
Identification by IR	Conforms to structure	Conforms

***Traceable to USP Reference Standard 1601383 with Current Lot No: G0I192**

Storage Condition: Store at room temperature and keep the container tightly closed.

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

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Assay by GC-FID

METHOD: GC- FID conditions:

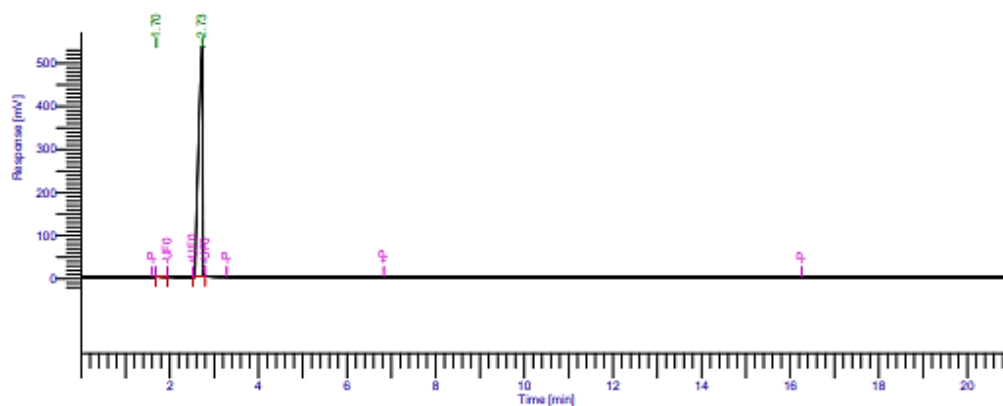
Column: Agilent Technologies DB-FFAP 30mx 0.530mm, 1.0micron

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	: 23-04-2024 16:36:53
Operator	: manager	Sample Name	: Chloroform
Sample Number	: 001	Study	:
AutoSampler	: BUILT-IN	Rack/Vial	: 0/23
Instrument Name	: Clarus 690	Channel	: A
Instrument Serial #	: 690S23050206	A/D mV Range	: 1000
Delay Time	: 0.00 min	End Time	: 21.00 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	: 23-04-2024 12:37:48	Cycle	: 1



GC Reports

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Area [%]
1		1.696	5189.05	948.00	0.15
2		2.731	3423038.81	535740.57	99.85
			3428227.86	536688.57	100.00

Missing Component Report

Component Expected Retention (Calibration File)

All components were found

Purity by GC-FID: 99.85 %

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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: Chloroform

Product Code: PSR28267

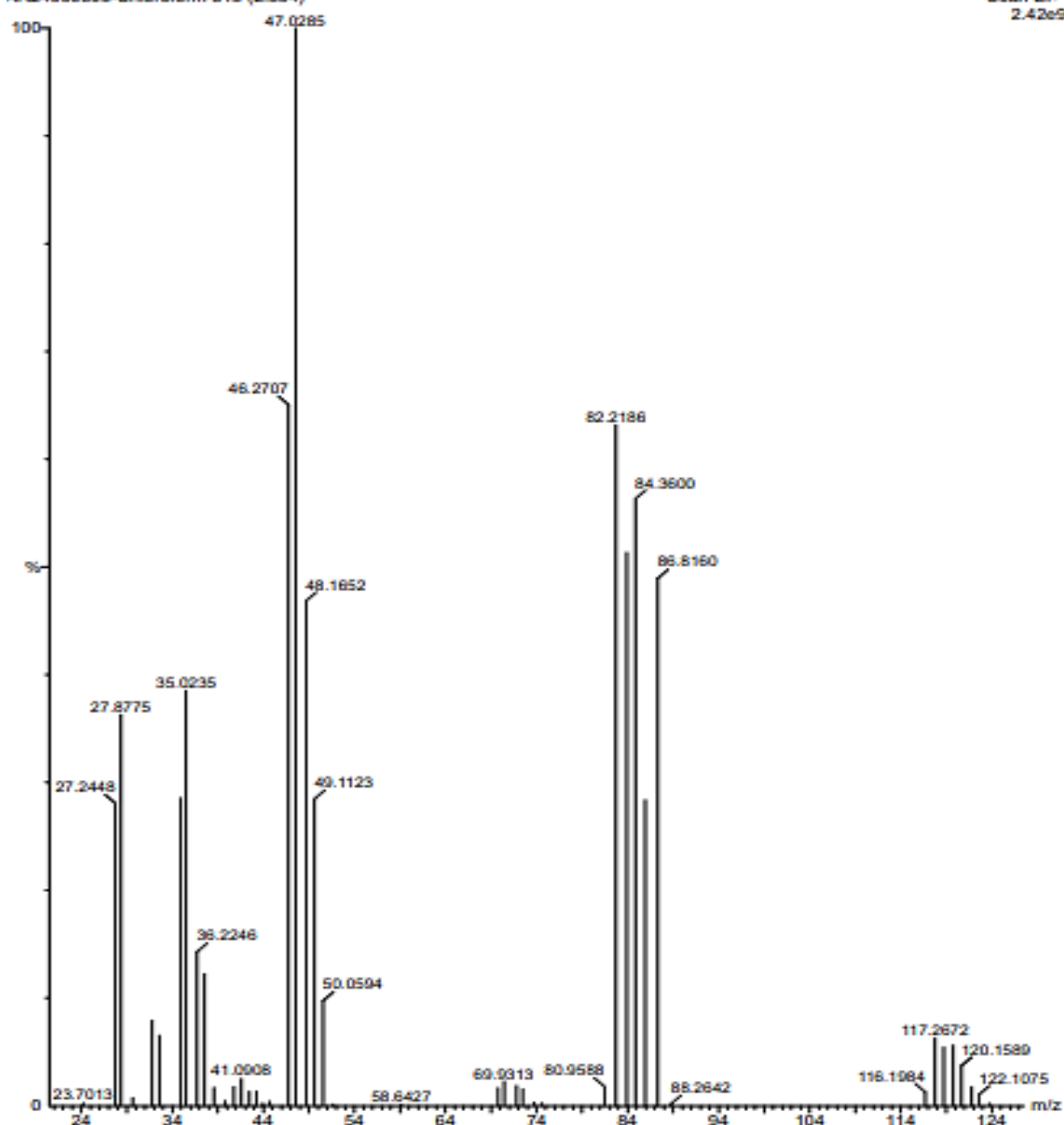
Chloroform-C28267H0324

AR24000303-Chloroform 513 (2.564)

, 26-Apr-2024 + 21:27:39

Scan El+

2.42e9



Identification by GC-MS: Conform to molecular

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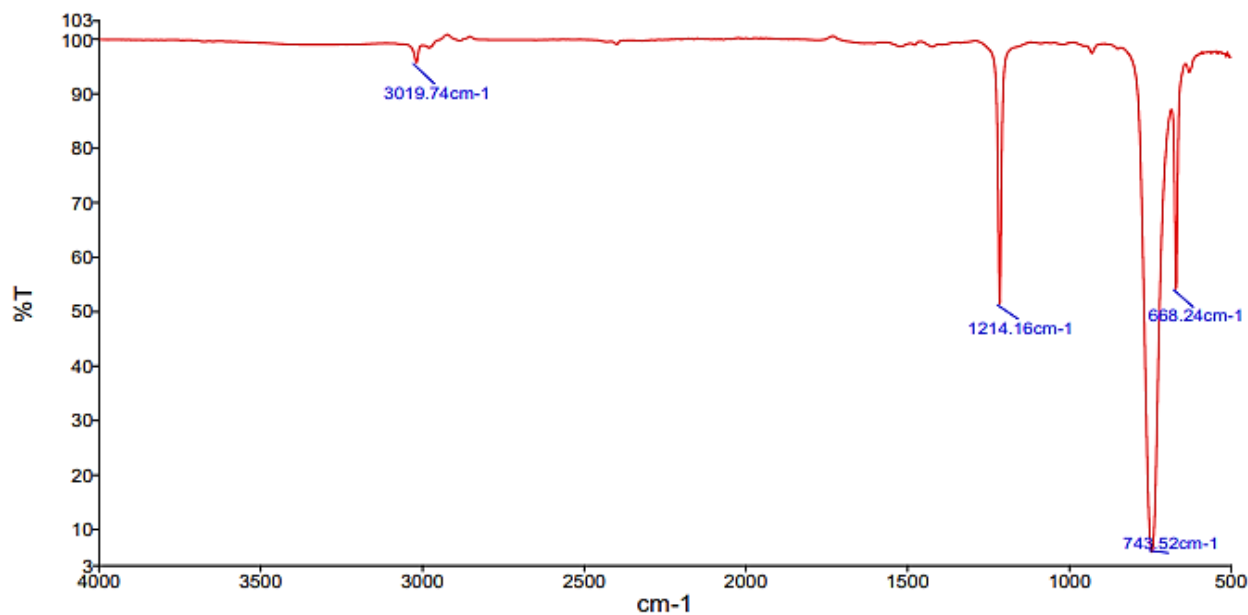
Infrared spectrum:

Product Name: Chloroform

Product Code: PSR28267

PerkinElmer Spectrum IR Version 10.7.2
23 April 2024 12:30

Analyst
Date



Source Spectra Results		
Spectrum Name		Number Of Peaks
AR24000216-CHLOROFORM-C28267H0324_1		4
List of Peak Area/Height		
Peak Number	X (cm-1)	Y (%T)
1	3019.74	95.79
2	1214.16	51.51
3	743.52	5.76
4	668.24	54.26

Identification by IR: Conforms to structure

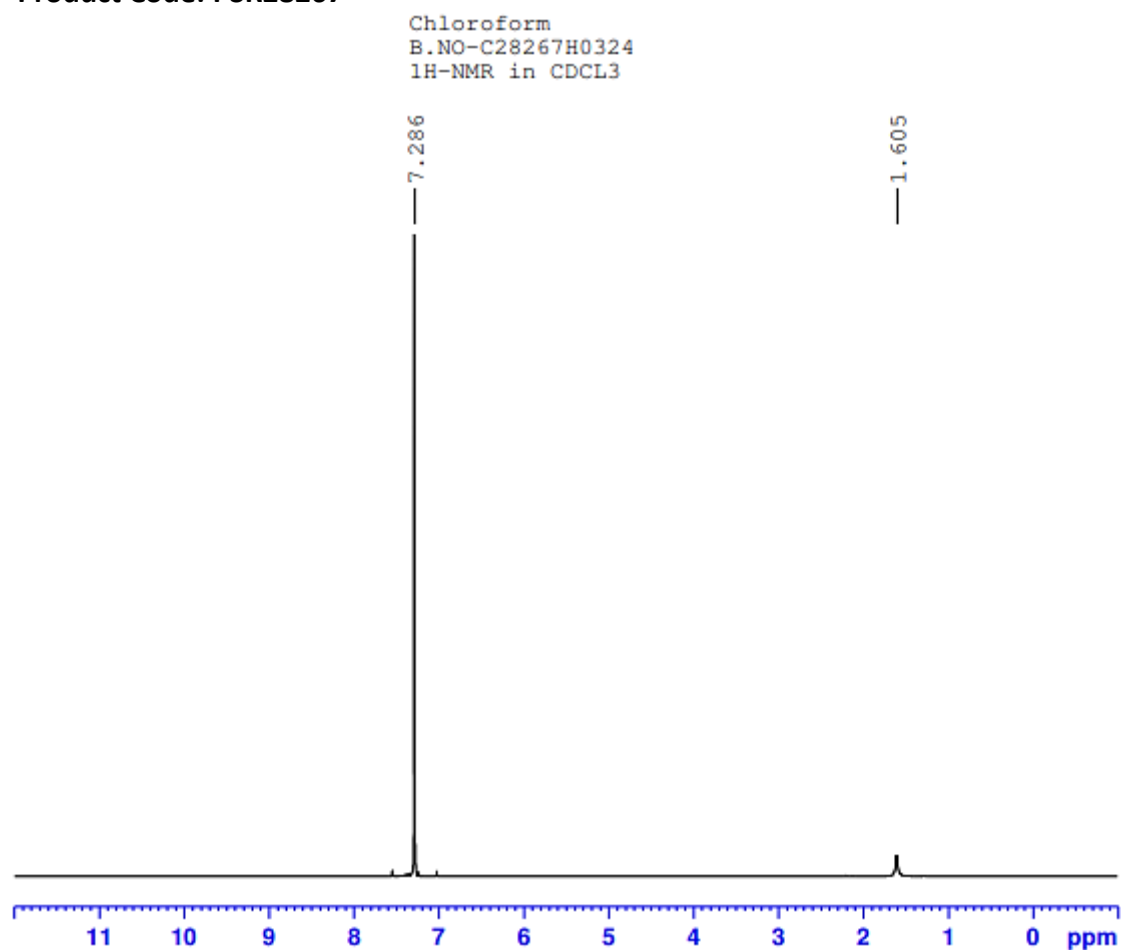
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¹H NMR Spectrum:

Product Name: Chloroform

Product Code: PSR28267



Identification by ¹H NMR: Conforms to structure

Maximum limits of impurities

WATER DETERMINATION

Method: Karl Fisher titration

Water Content (PSR28267) = **0.0680 %**

Approved By
Technical Head

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