

Certificate of Analysis

Phthalic acid

PurCert Standard

(Secondary Reference Standard)

Product Number	PSR37480	CAS No.	88-99-3
Brand	PureSynth	Lot No.	P37480P0125
Molecular Formula	C ₈ H ₆ O ₄	Date of Mfg.	January,2025
Molecular Weight	166.13 g/mol	Date of Exp.	December,2028

Test	Specification	Result
Description	White to off white powder or crystals	White Crystals
Assay (HPLC)	≥ 99.5 %	99.93 %
Water (By KF)	NMT 0.200 %	0.186 %
Identification by ¹ H NMR	Conforms to structure	Conforms
Identification by MS	Conforms to molecular mass	Conforms
Identification by IR	Conforms to structure	Conforms

***Traceable to USP Reference standard 1535899, Lot No: R149T0.**

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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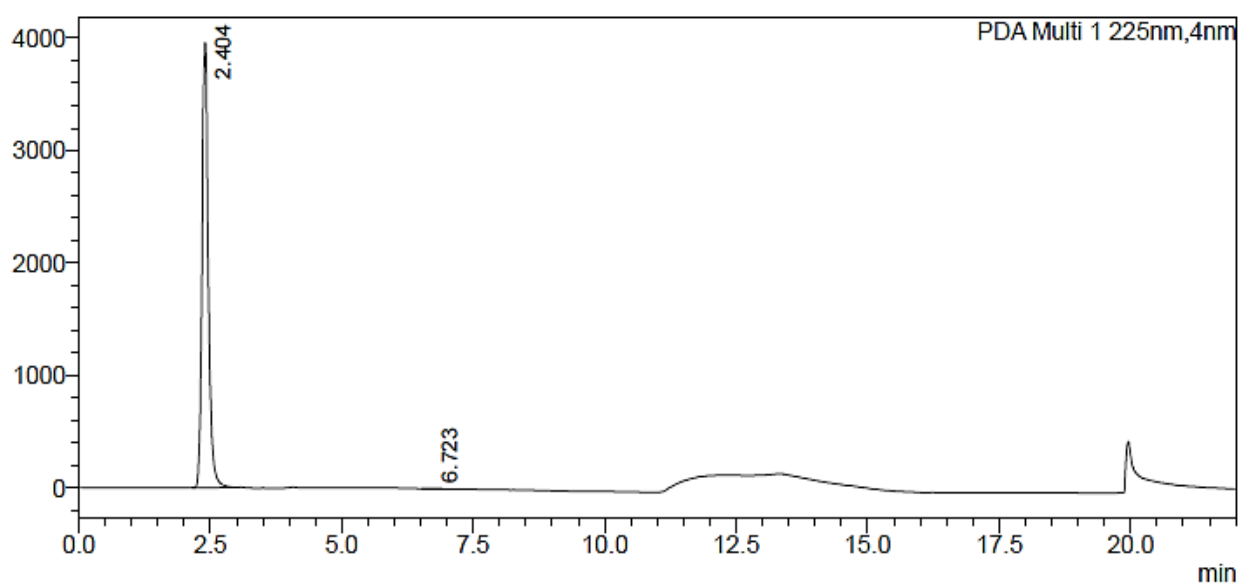
Assay by HPLC

<Sample Information>

Acquired by : System Administrator
Sample Name : PHTHALIC ACID-P37480P0125
Tray# : 4
Vial# : 33
Injection Volume : 10 uL
Data Filename : AR25000167-PHTHALIC ACID-P37480P0125.lcd
Method Filename : shimpack-AA90-ACN-10-1.lcm
Batch Filename : 19-2-2025-1.lcb
Report Filename : DEFAULT.lsr
Date Acquired : 2/19/2025 2:23:25 PM
Date Processed : 2/19/2025 2:57:34 PM

<Chromatogram>

mAU



<Peak Table>

PDA Ch1 225nm

Ret. Time	Area	Area%	Height
2.404	32963830	99.931	3956786
6.723	22693	0.069	1781
	32986523	100.000	3958567

Purity by HPLC: 99.93 %

IDENTIFICATION TESTS

MS Spectrum:

Mass by MS:

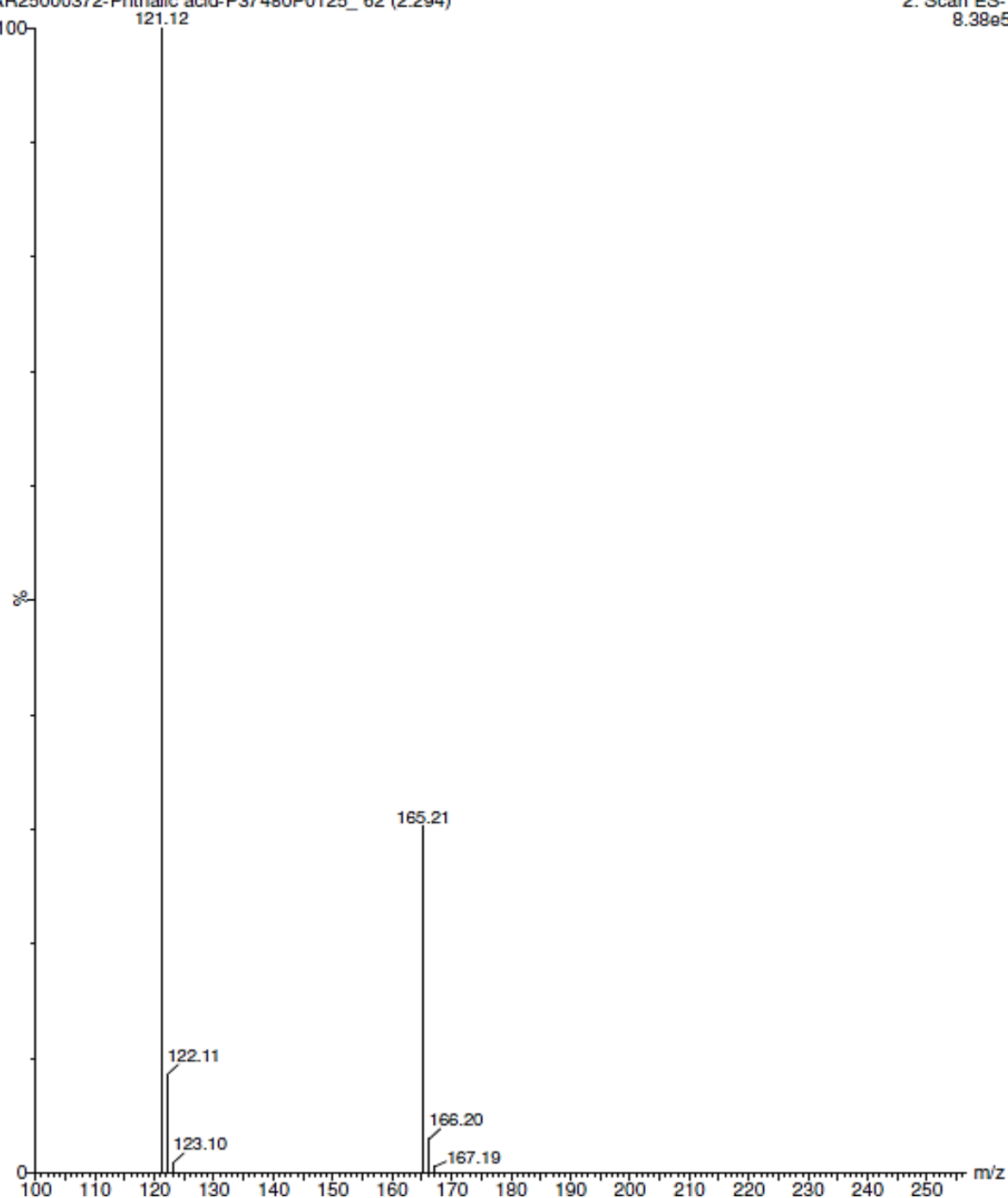
Product Name: Phthalic acid

Product Code: PSR37480

19-Feb-2025 16:14:53

2: Scan ES-
8.38e5

AR25000372-Phthalic acid-P37480P0125_ 62 (2.294)



Identification by MS: Conforms to molecular mass

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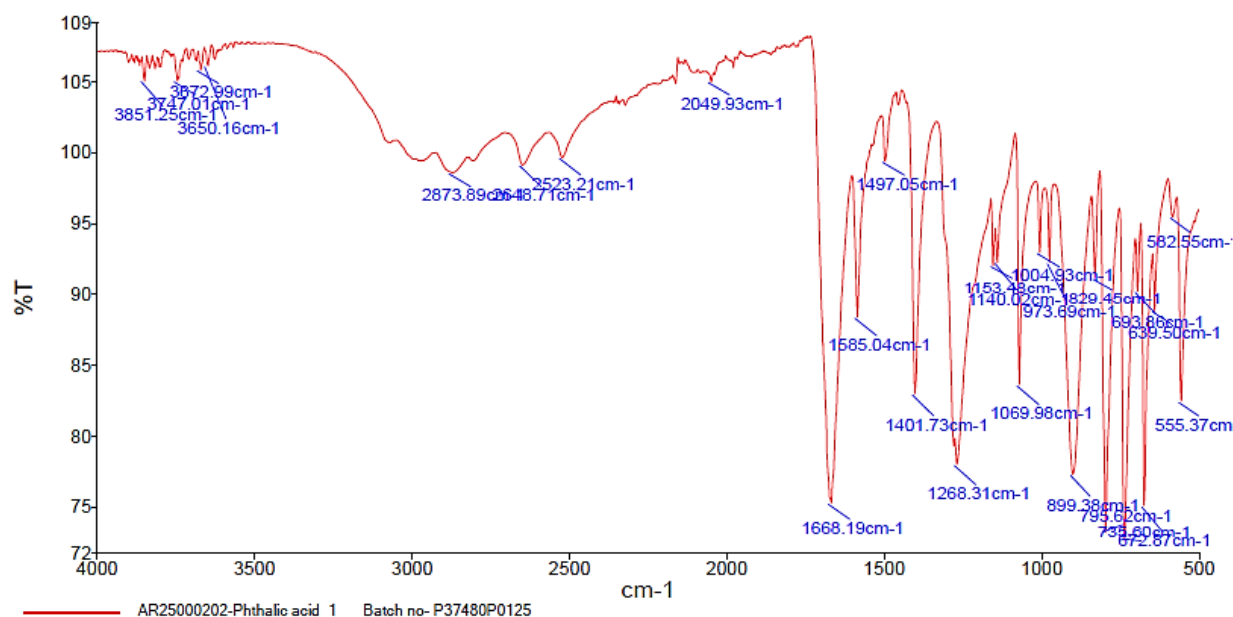
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Infrared spectrum:

Product Name: Phthalic acid

Product Code: PSR37480

Analyst
Date



Source Spectra Results		
Spectrum Name	Number Of Peaks	
AR25000202-Phthalic acid_1	27	
List of Peak Area/Height		
Peak Number	X (cm-1)	Y (%T)
1	3851.25	105.10
2	3747.01	105.09
3	3672.99	105.87
4	3650.16	106.16
5	2873.89	98.61
6	2648.71	99.16
7	2523.21	99.69
8	2049.93	105.04
9	1668.19	75.28
10	1585.04	88.42
11	1497.05	99.42
12	1401.73	83.00
13	1268.31	78.01
14	1153.48	92.04
15	1140.02	92.25
16	1069.98	83.65
17	1004.93	92.98
18	973.69	92.28
19	899.38	77.31
20	829.45	91.17
21	795.62	73.17
22	735.60	72.63
23	693.86	90.23
24	672.87	75.08
25	639.50	88.87
26	582.55	95.48
27	555.37	82.47

Identification by IR: Conforms to structure

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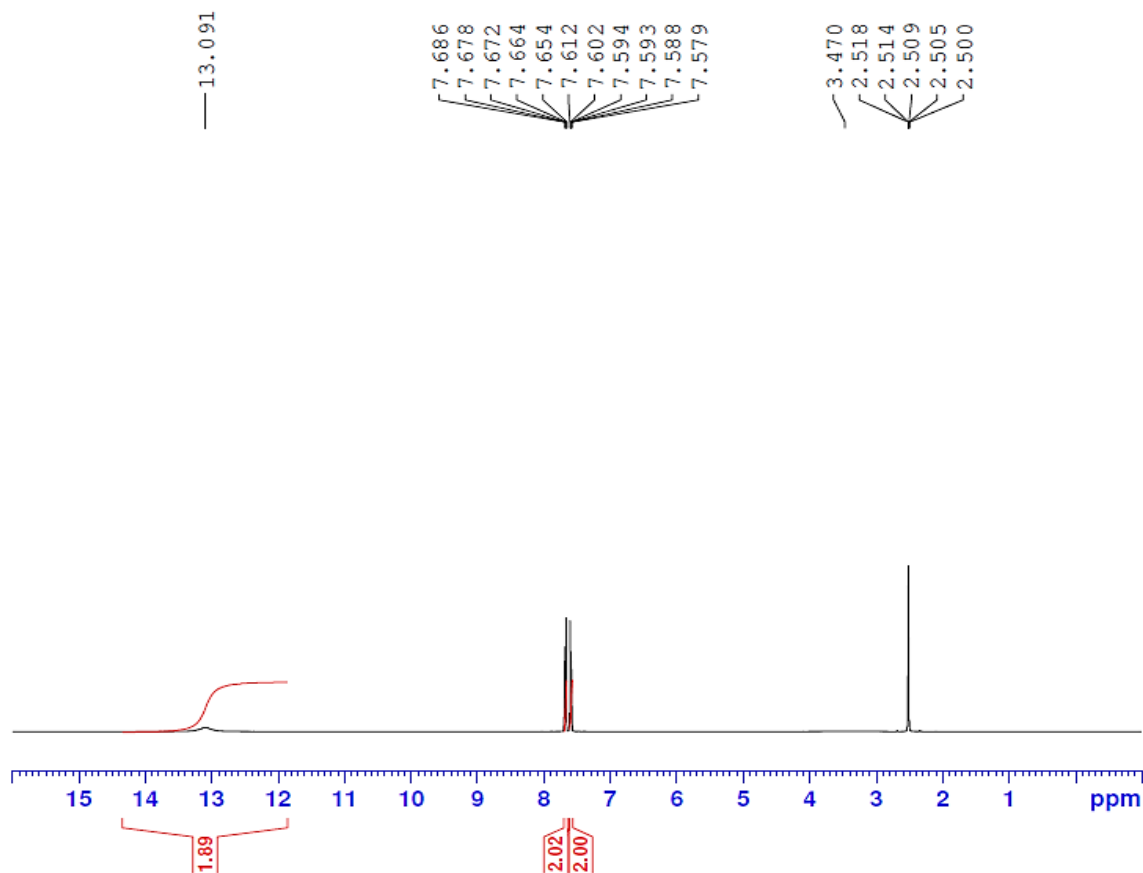
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¹H NMR Spectrum:

Product Name: Phthalic acid

Product Code: PSR37480

Phthalic acid
B.No : P37480P0125
¹H-NMR in DMSO



Identification by ¹H NMR: Conforms to structure

Maximum limits of impurities

WATER DETERMINATION

Method: Karl Fisher titration

Water Content (PSR37480) = **0.186 %**

Approved By
Head - Technical

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