

Certificate of Analysis

Product Name:

Eicosane PurTech Standard for GC [Includes all characterization data]
(Secondary Reference Standard)

Product No.: PSI1066
Lot No.: Sample COA
Brand: PureSynth
CAS No.: 112-95-8
Molecular Formula: C₂₀H₄₂
Molecular Weight: 282.56 g/mol
Date of Mfg.: NA
Date of Exp.: NA

Test	Specification	Result
Appearance	White Solid	White Solid
Assay (By GC)	≥ 98.0 %	98.31 %
Water (By KF)	NMT 0.500 %	0.481 %
Potency	-	97.42 %
Density	0.750 -0.800 g/cm ³	0.788 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 1800175, Lot no: F254A0**

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For queries on this COA, please contact our technical team at technical@pure-synth.com

ASSAY BY GC-FID

METHOD: GC- FID conditions:

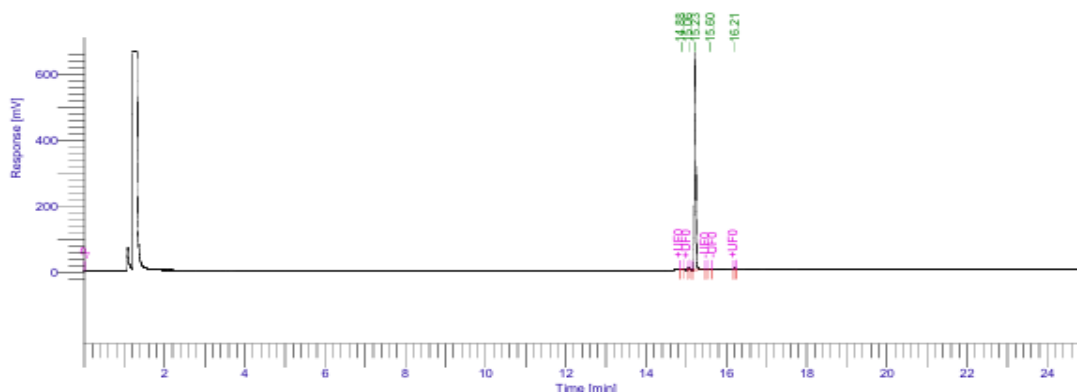
Column: Agilent Technologies DB-FFAP 30mx 0.530mm, 1.0micron

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	: 07-04-2026 11:49:06
Operator	: manager	Sample Name	: EICOSANE_E1066B0326
Sample Number	: 001	Study	:
AutoSampler	: BUILT-IN	Rack/Vial	: 0/33
Instrument Name	: Clarus 690	Channel	: A
Instrument Serial #	: 690S23050206	A/D mV Range	: 1000
Delay Time	: 0.00 min	End Time	: 25.00 min
Sampling Rate	: 12.5000 pts/s		
Sample Volume	: 1.000000 ul		
Sample Amount	: 1.0000	Area Reject	: 0.000000
Data Acquisition Time	: 06-04-2026 17:12:02	Dilution Factor	: 1.00
		Cycle	: 1



GC Reports

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Area [%]
1		14.880	4565.16	2148.68	0.32
2		15.057	10038.59	5460.46	0.71
3		15.227	1394735.95	660648.62	98.09
4		15.600	2934.63	1383.95	0.21
5		16.215	9674.22	5746.83	0.68
			1421948.54	675388.53	100.00

Missing Component Report
Component Expected Retention (Calibration File)

All components were found

Assay by GC: 98.09 %

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IDENTIFICATION TESTS

GC-MS Spectrum:

METHOD: GC-MS conditions:

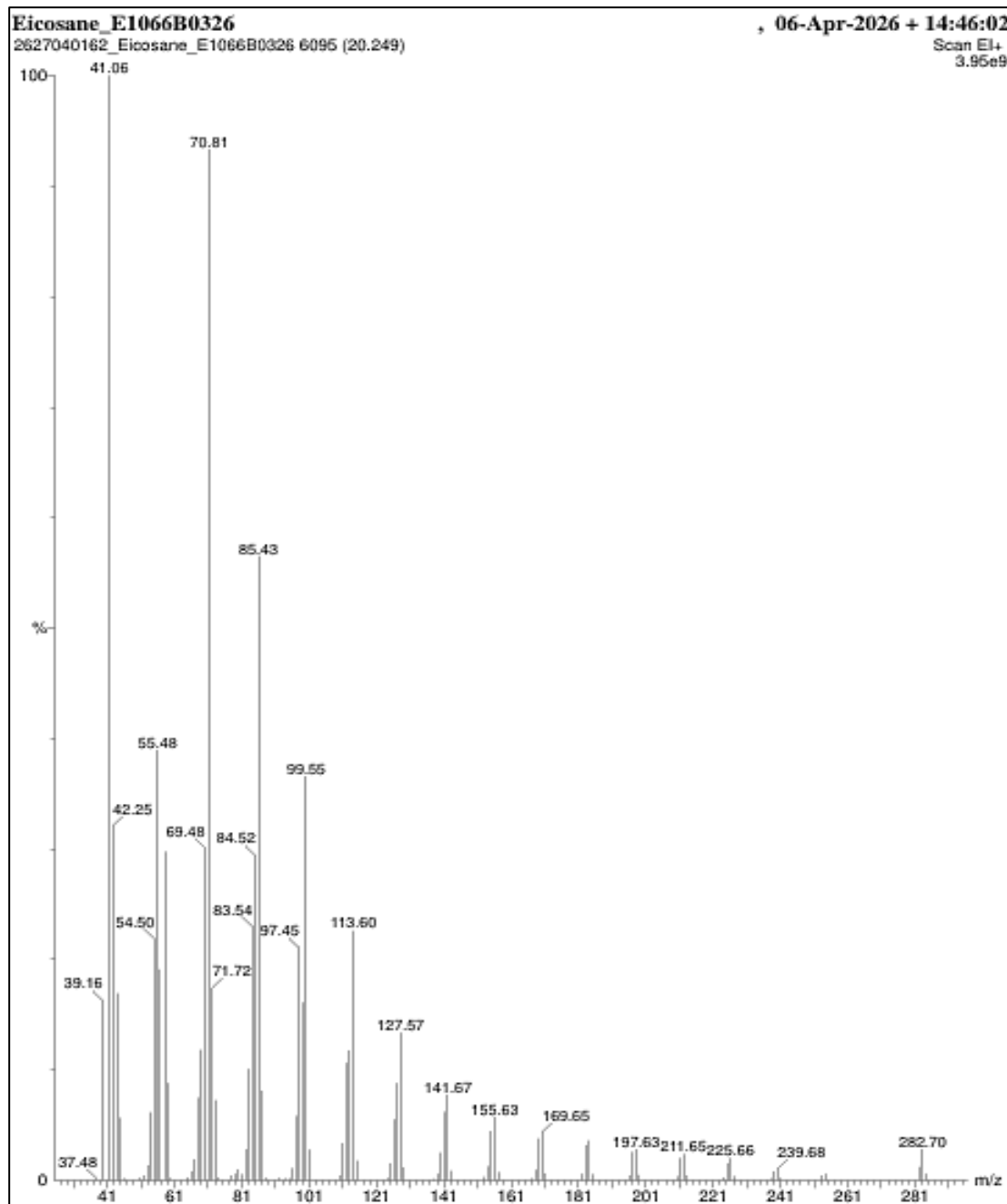
Column: Agilent Technologies, Elite -5MS, 30 m X 0.25 mm, 1.0micron

Instrument: Perkin Elmer, **Carrier gas:** Helium

Source Temp.: 230°C, Transfer line: 250°C

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

Source energy: 70eV



Identification by GC-MS: Conforms to molecular mass

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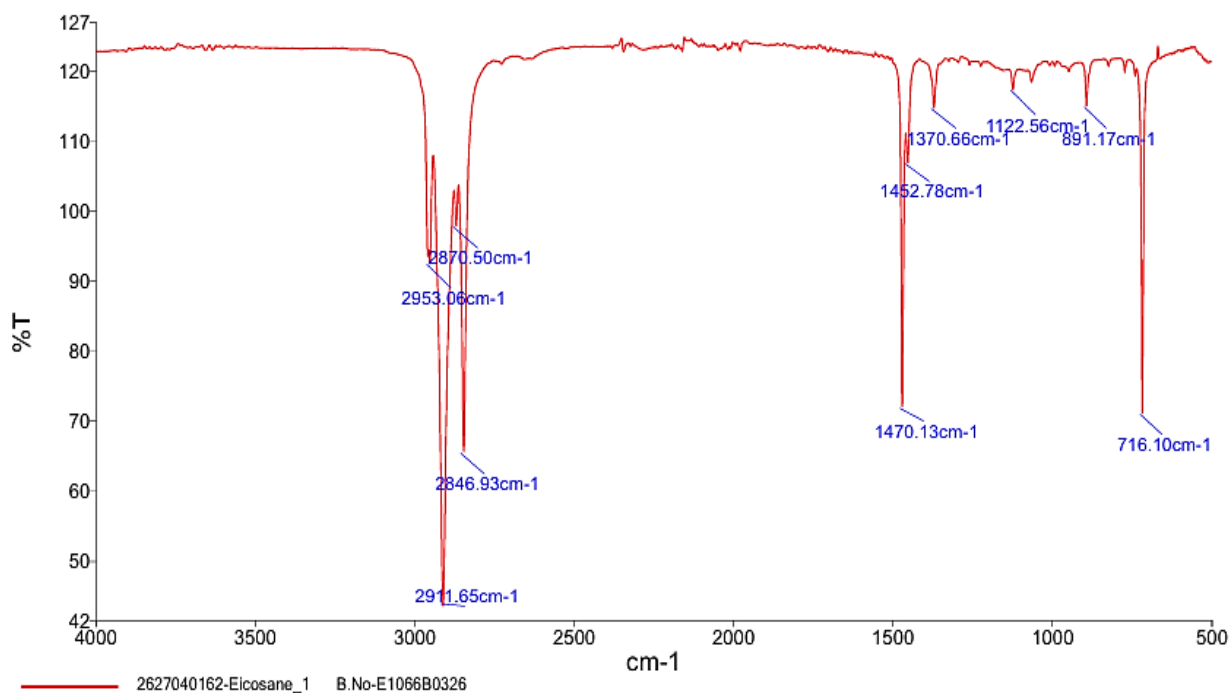
Infrared spectrum:

Product Name: Eicosane
Product Code: PSI1066

PerkinElmer Spectrum IR Version 10.7.2
 06 April 2026 15:12

Analyst
 Date

Analyst
 06 April 2026 15:12



Source Spectra Results	
Spectrum Name	Number Of Peaks
2627040162-Eicosane_1	10

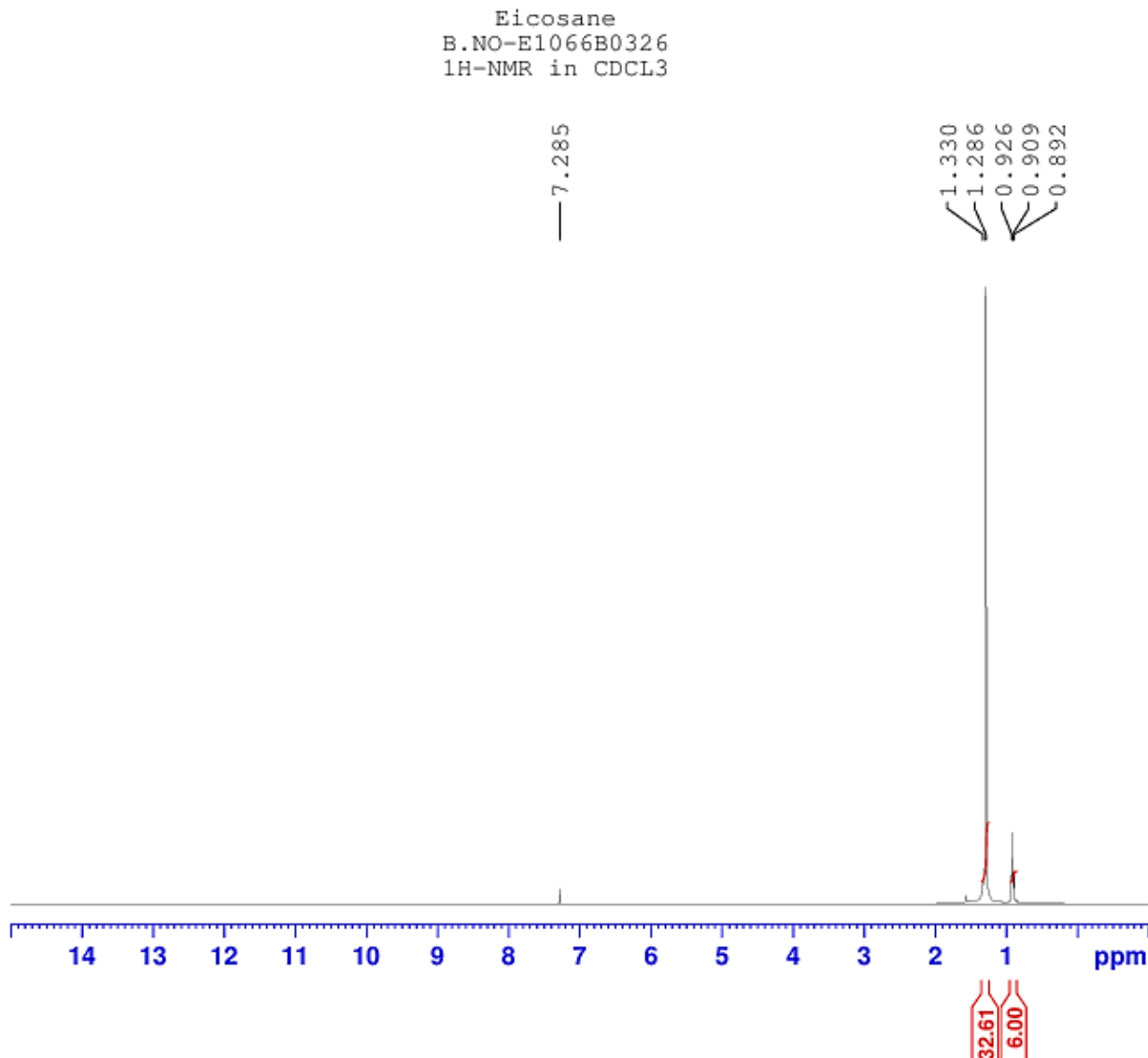
List of Peak Area/Height		
Peak Number	X (cm-1)	Y (%T)
1	2953.06	92.63
2	2911.65	43.64
3	2870.50	97.94
4	2846.93	65.67
5	1470.13	72.10
6	1452.78	106.95
7	1370.66	114.78
8	1122.56	117.43
9	891.17	115.04
10	716.10	71.21

Identification by IR: Conforms to structure

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¹H NMR Spectrum:

Product Name: Eicosane
Product Code: PSI1066



Identification by ¹H NMR: Conforms to structure

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Maximum limits of impurities

WATER DETERMINATION

Method: Karl Fisher titration

Water Content (PSI1066) = **0.472 %**

Remarks:

This is to certify that the mentioned batch has been analysed at the time of quality release and has been found to be in compliance with prescribed specifications

The current Specification sheet may be available at www.pure-synth.com

Inspect on receipt

Storage Condition:

Store at a temperature of 2-8 °C and keep the container tightly closed.

PureSynth Research Chemicals GmbH

This is electronically-generated copy & is valid without a signature

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