PureSynth
Research Chemicals

Certificate of Analysis

Methyl Oleate

PurCert Standard for GC

Secondary Reference Standard

Product Number	PSR37010	**CAS No.**	112-62-9
Brand	PureSynth	**Lot No.**	M37010T1223
Molecular Formula	$C_{19}H_{36}O_2$	**Date of Mfg.**	December,2023
Molecular Weight	296.50 g/mol	**Date of Exp.**	November,2027

Test	Specification	Result
Description	Colorless liquid	Colorless liquid
Assay (GC-FID)	≥ 99.5 %	99.55 %
Water (By KF)	NMT 0.1000 %	0.0768 %
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 1431556, Lot no: R12270**

Storage Condition: Store at a temperature of -20°C and keep the container tightly closed.

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

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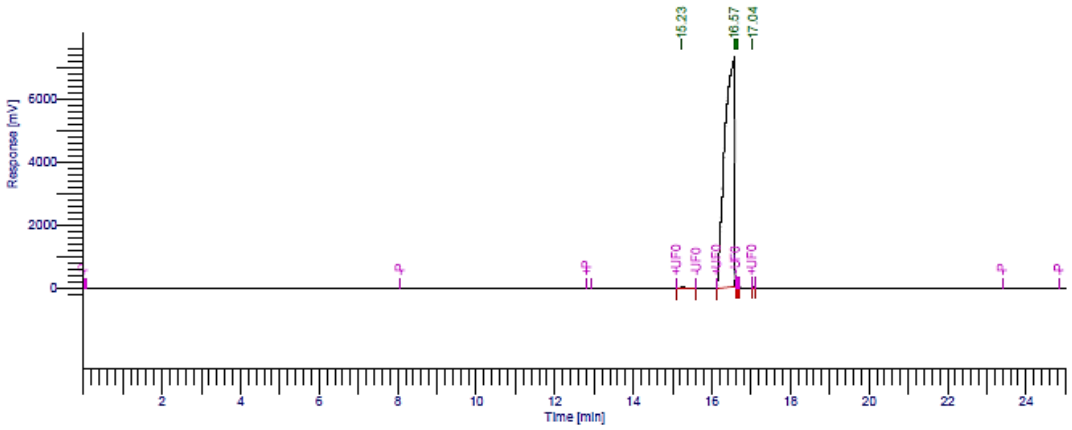
Assay by GC-FID

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	: 16-03-2024 16:13:46
Operator	: manager	Sample Name	: METHYL OLEATE-M37010T1223
Sample Number	: 001	Study	:
AutoSampler	: BUILT-IN	Rack/Vial	: 0/39
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	Area Reject	: 0.000000
Sample Amount	: 1.0000	Dilution Factor	: 1.00
Data Acquisition Time	: 15-03-2024 12:31:56	Cycle	: 1



GC Reports

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Area [%]
1		15.233	319616.90	46672.96	0.25
2		16.573	1.25e+08	7.28e+06	99.55
3		16.603	74986.83	138133.45	0.06
4		16.672	101250.26	120443.21	0.08
5		17.040	76212.53	44954.95	0.06
			1.26e+08	7.63e+06	100.00

Warning -- Signal level out-of-range in peak

Missing Component Report

Component	Expected Retention (Calibration File)

All components were found

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

Purity by GC-FID: 99.55 %

IDENTIFICATION TESTS

GC-MS Spectrum:

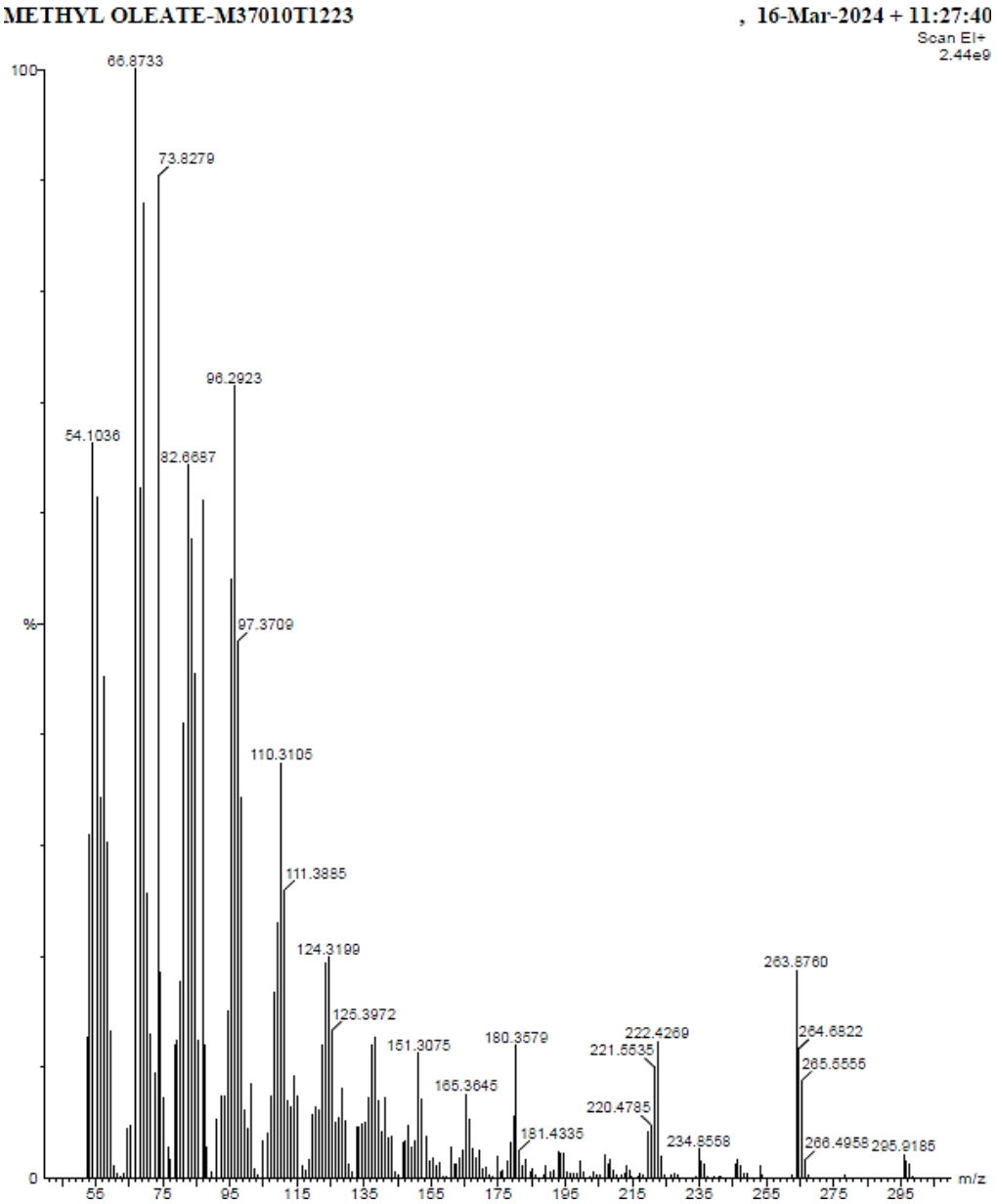
METHOD: GC-MS conditions:

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

Mass by GC-MS:

Product Name: Methyl Oleate

Product Code: PSR37010



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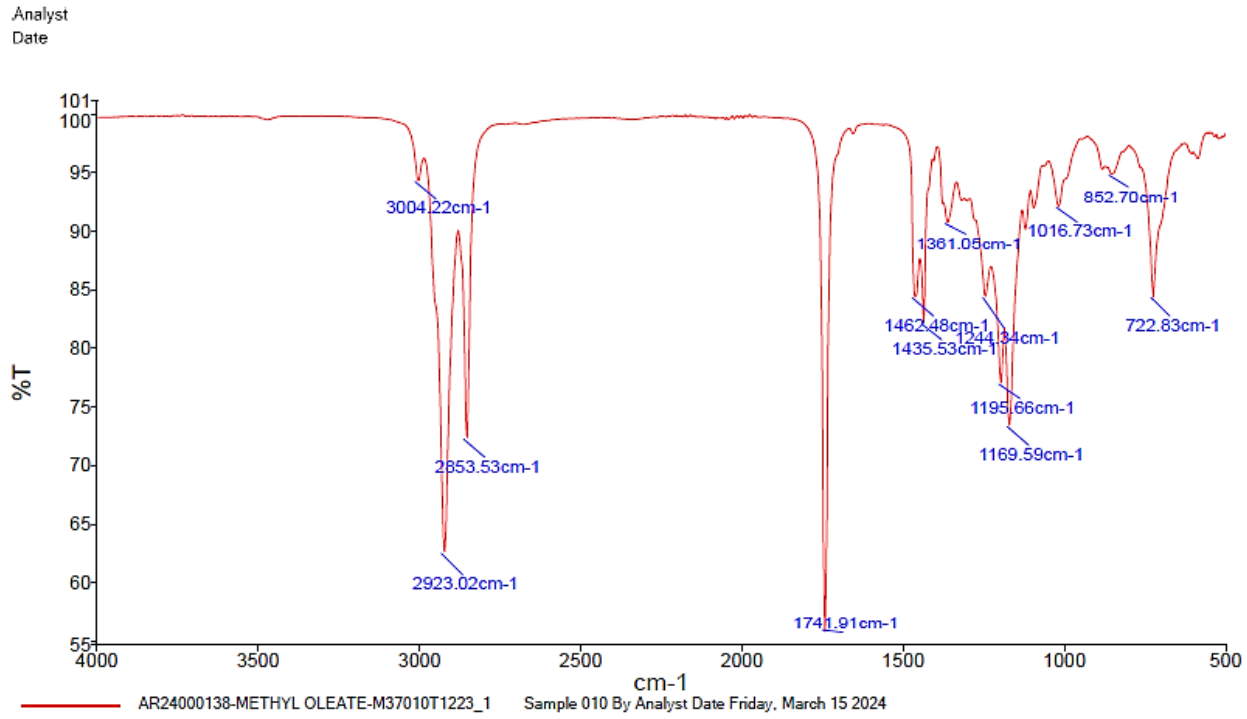
Identification by GC-MS: Conforms to molecular mass

Infrared spectrum:

Product Name: Methyl Oleate

Product Code: PSR37010



Source Spectra Results	
Spectrum Name	Number Of Peaks
AR24000138-METHYL OLEATE-M37010T1223_1	13

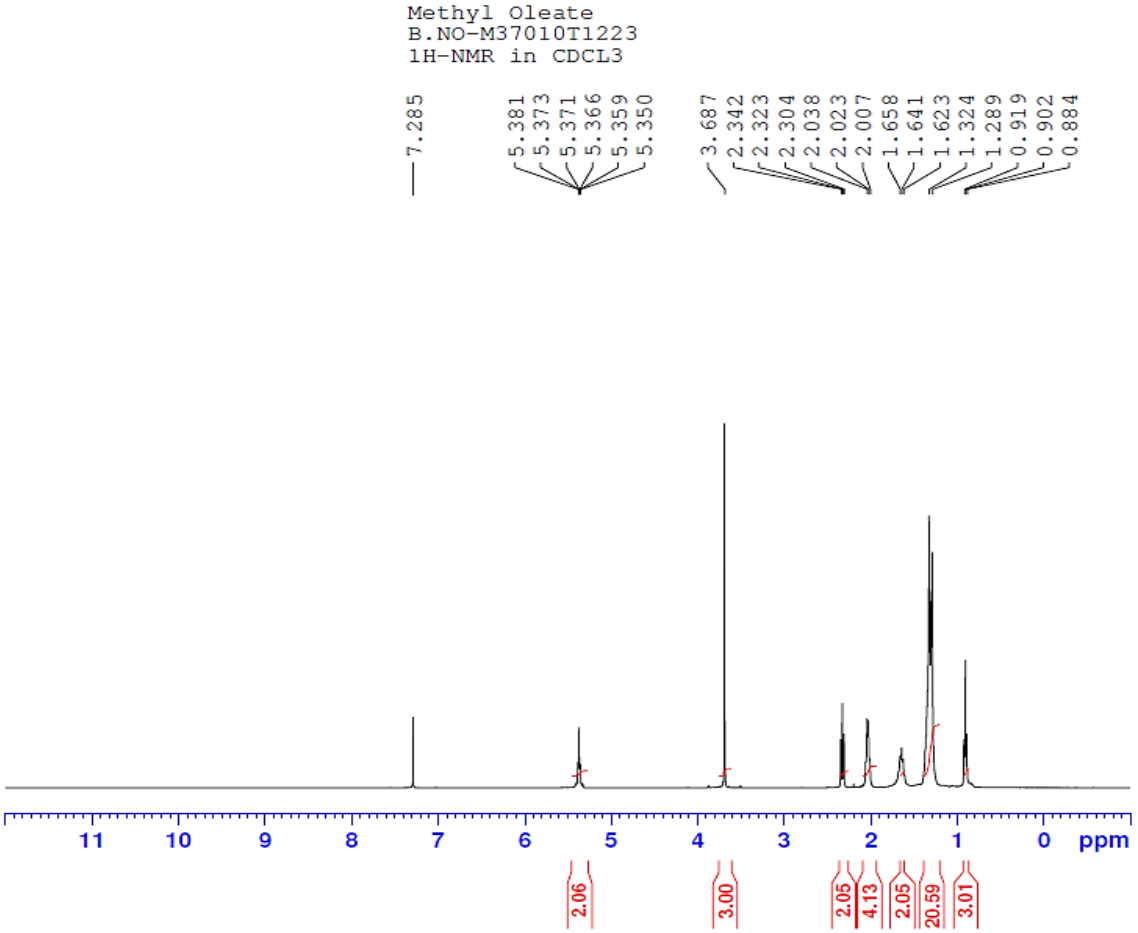
List of Peak Area/Height		
Peak Number	X (cm-1)	Y (%T)
1	3004.22	94.34
2	2923.02	62.63
3	2853.53	72.38
4	1741.91	55.80
5	1462.48	84.45
6	1435.53	82.24
7	1361.05	90.76
8	1244.34	84.49
9	1195.66	77.08
10	1169.59	73.45
11	1016.73	92.17
12	852.70	94.91
13	722.83	84.46

Identification by IR: Conforms to structure

^{1}H NMR Spectrum:

Product Name: Methyl Oleate

Product Code: PSR37010



Identification by ^{1}H NMR: Conforms to structure

Maximum limits of impurities

WATER DETERMINATION

Method: Karl Fisher titration

Water Content (PSR37010) = **0.0768 %**

Approved By

Head - Technical

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