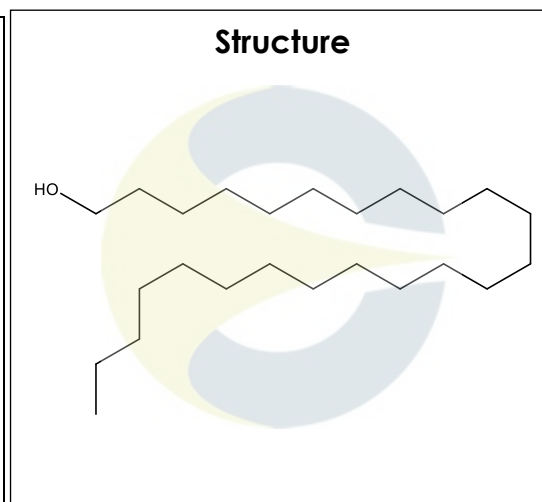


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PRODUCT NAME	1-Tetracosanol
PART NUMBER	00020151
STANDARD TYPE	Primary (P)
LOT NUMBER	00020151-25W
REPORT NUMBER	CDXA-RSS-5223-02
SAMPLE NUMBER	CDXA-12-6450
DATE OF SAMPLE	09/26/2012
DATE OF RE-EVALUATION	09/19/2016 (1 st); 03/05/2021 (2 nd)
DATE OF REPORT	03/31/2021



CHEMICAL NAMES	n-Tetracosanol; Lignoceryl alcohol; Lignoceric alcohol; Lignoceryl alcohol; Tetracosyl alcohol
CHEMICAL FORMULA	C ₂₄ H ₅₀ O
MOLECULAR WEIGHT (MW)	354.65
CHEMICAL FAMILY	Fatty alcohols
CAS NUMBER	[506-51-4]
EC#(EINECS)	208-043-9
RTECS	XB6080000

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	97.5%
GC	0.700.10.2.METH140	≥ 90%	97.6%
NMR	99.1-CD-1.0-000122	Conforms to structure	Conforms to structure
Mass Spectrum	0.700.10.2.METH140	Conforms	Conforms
Residual Solvent	99.1-CD-5.0-000115	NA	Chloroform - 0.1%
Water	0.700.12.37	NA	ND
Appearance	NA	NA	White powder

ADJUSTED PURITY: 97.5% IS BASED ON (100 - 0.1 SOLVENTS - 0.0 WATER) X 97.6% GC

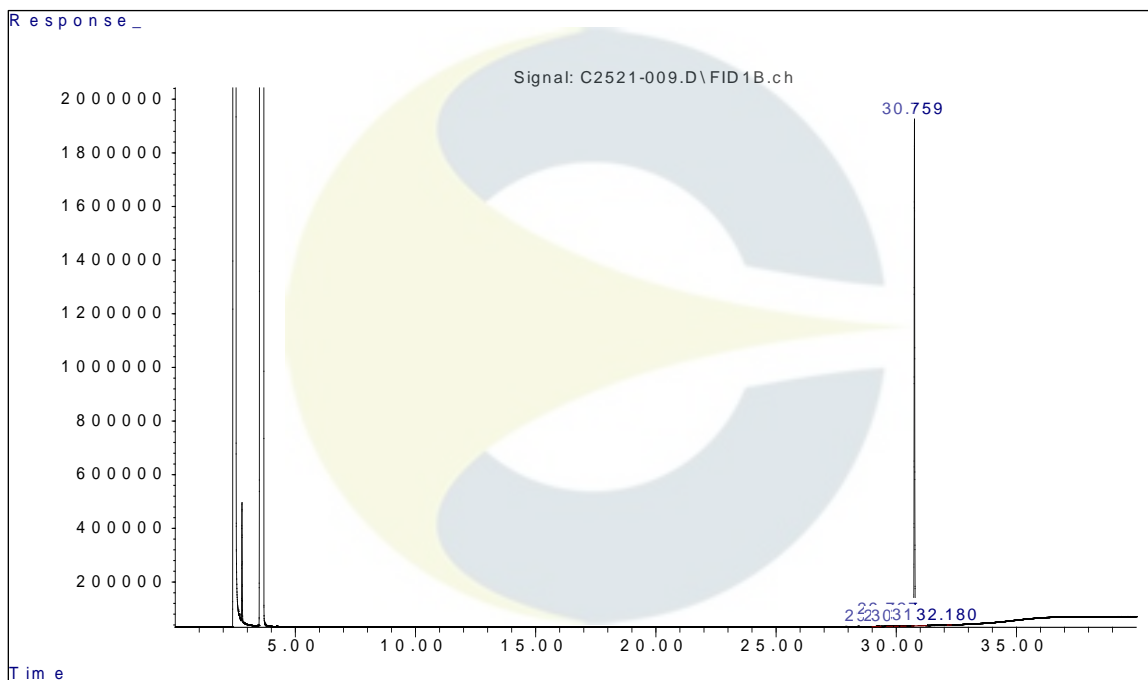
STORAGE CONDITIONS

STORAGE	+4 °C in a dry place.
EXPIRATION DATE	03/2026 under the above conditions.

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ANALYTICAL CONDITIONS

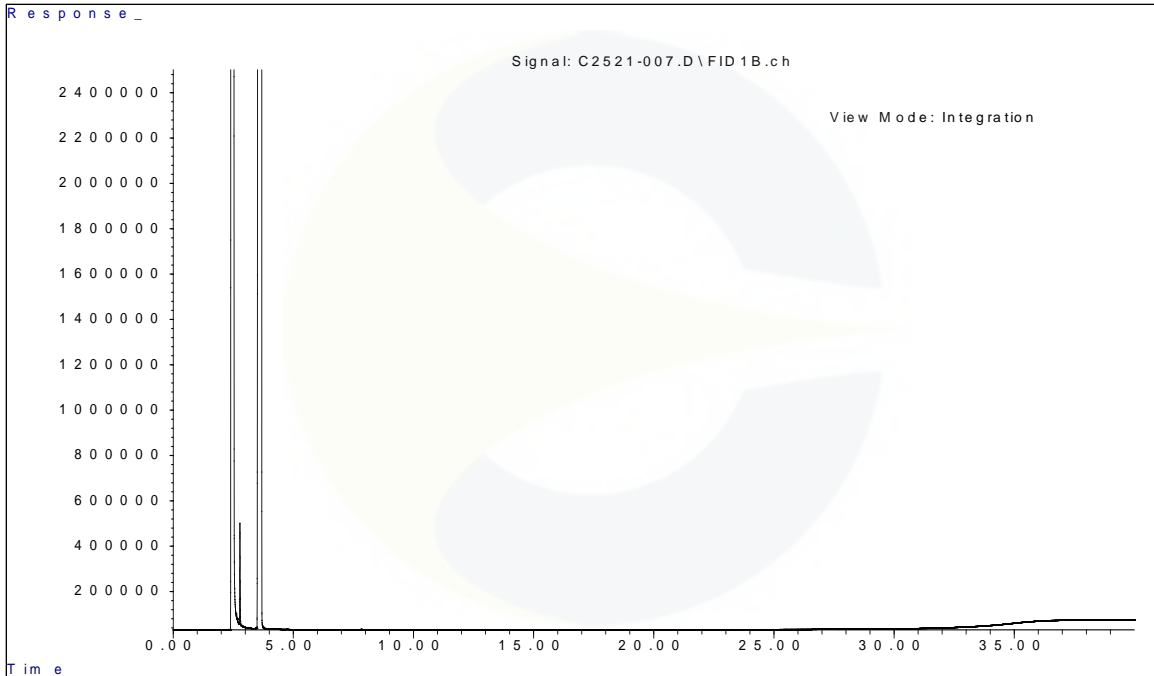
INSTRUMENT	AGILENT 7890B WITH FLAME IONIZATION DETECTOR (FID) AND AGILENT 5977B MASS SELECTIVE DETECTOR (MSD)
COLUMN	Phenomenex Zebron ZB-5plus, 30 m x 0.32 mm x 0.25 µm
CARRIER GAS	Helium
COLUMN TEMP.	Isothermic 40 °C for 5.0 minutes, then increasing at 10.0 °C/minute to 340 °C. Hold at 340 °C for 5.0 minutes.
FLOW RATE	2.0 mL/minute
INJECTOR TEMP.	300 °C
INJECTOR SPLIT RATIO	20:1
INJECTION VOL.	1.0 µL
INJECTION CONC.	1.02 mg/mL in Methanol: Chloroform (1:1)
DETECTION	FID (350 °C) & MSD (Transfer line 280 °C, Source 230 °C, Quad 150 °C)

GC CHROMATOGRAM OF 1-TETRACOSANOL (CDXA-12-6450)


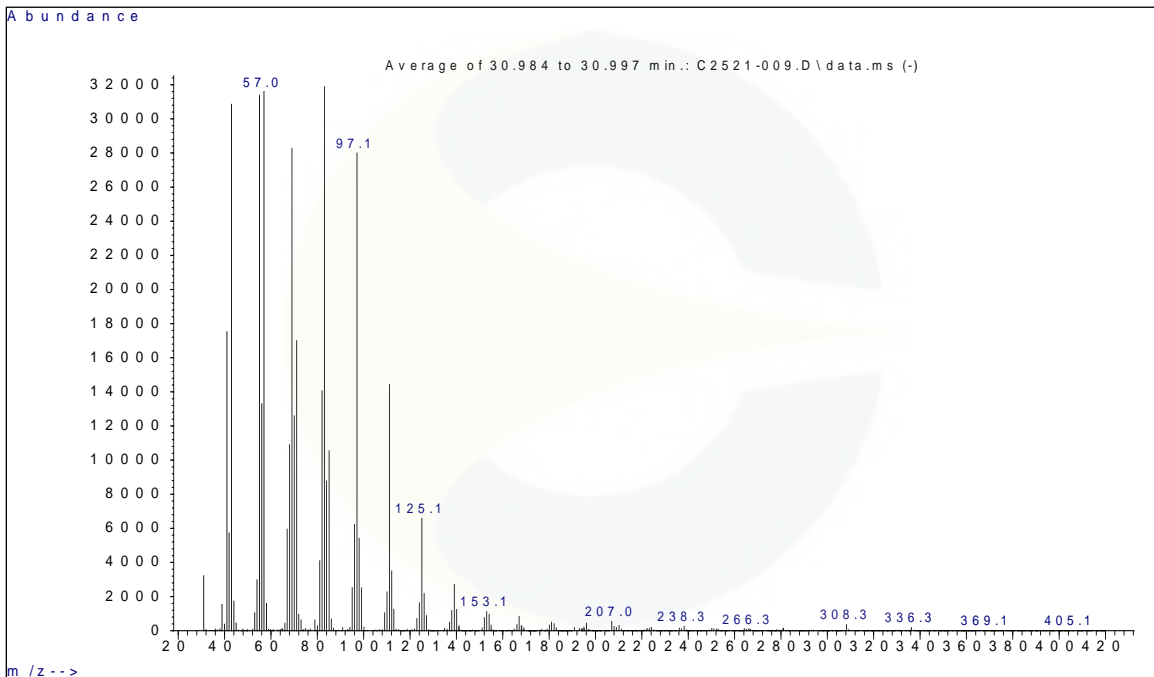
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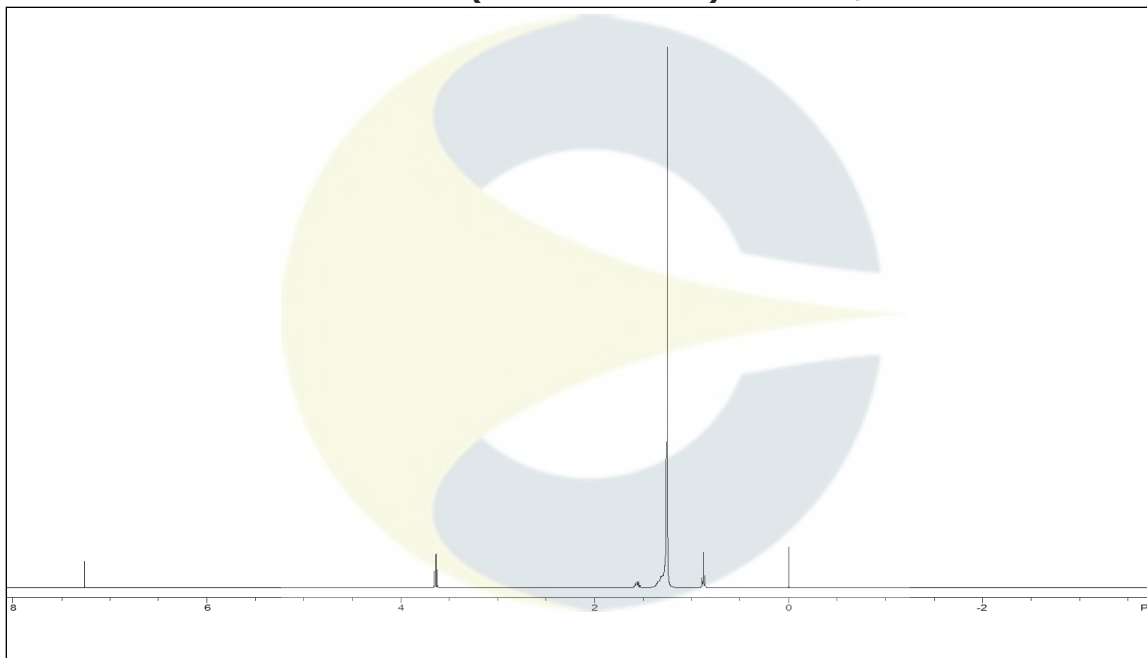


MASS SPECTRUM OF 1-TETRACOSANOL (CDXA-12-6450)

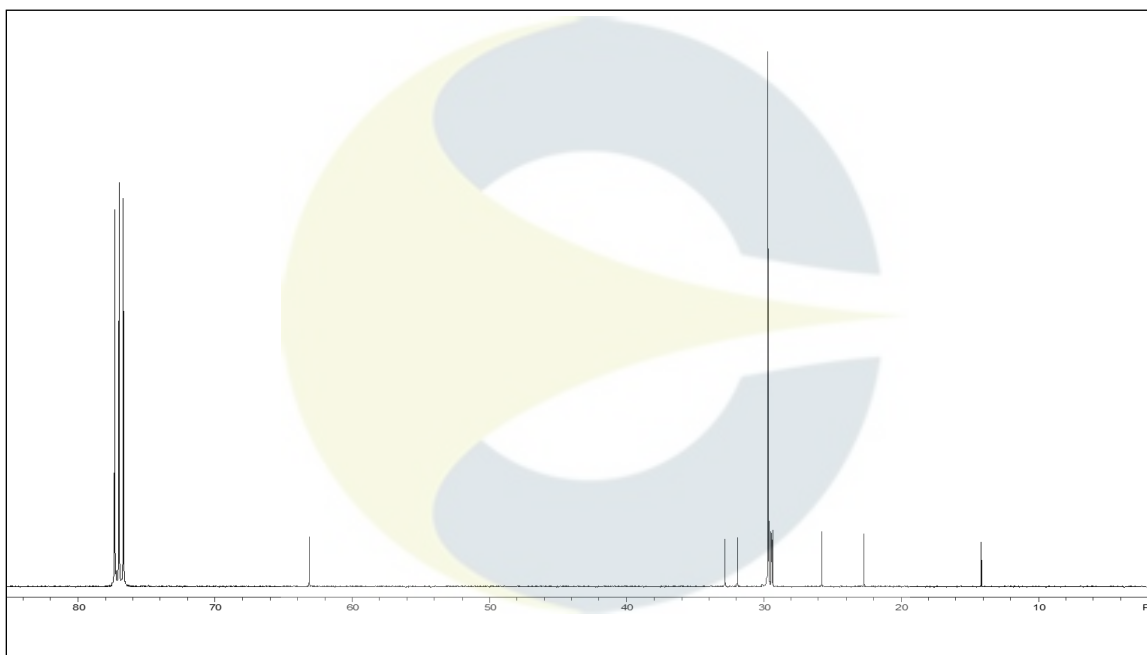


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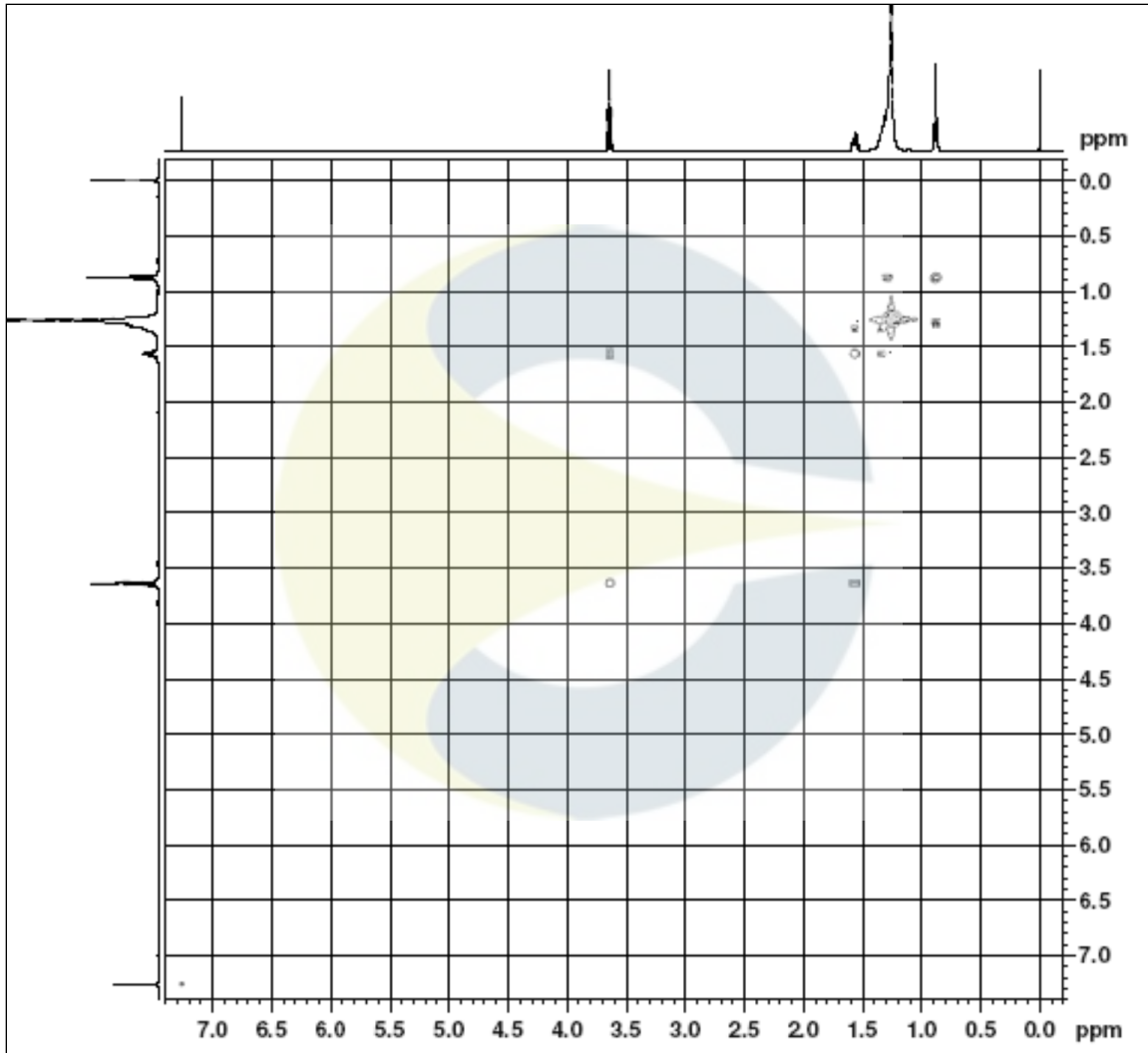
¹H-NMR SPECTRUM OF 1-TETRACOSANOL (CDXA-12-6450) IN CDCl₃



¹³C-NMR SPECTRUM OF 1-TETRACOSANOL (CDXA-12-6450) IN CDCl₃



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COSY-NMR SPECTRUM OF 1-TETRACOSANOL (CDXA-12-6450) IN CDCl₃

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	10/23/2012	New report
01	10/21/2016	Passed re-evaluation by GC/FID and KF. Updated expiration date, Analytical conditions, added RTECS number.
02	03/31/2021	Material passed reevaluation by GC-MS and KF. Updated analytical results, analytical conditions, chromatograms, and expiration date, Removed melting point.

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