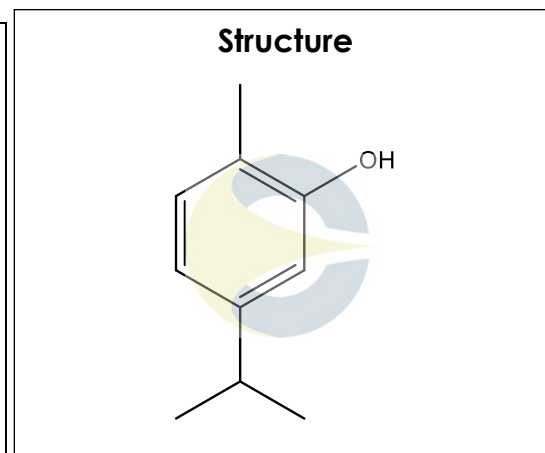


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<b>PRODUCT NAME</b>	Carvacrol
<b>PART NUMBER</b>	00003230
<b>STANDARD TYPE</b>	Primary (P)
<b>LOT NUMBER</b>	00003230-FYD
<b>REPORT NUMBER</b>	CDXA-RSS-8839-00
<b>SAMPLE NUMBER</b>	CDXP-20-00124
<b>DATE OF SAMPLE</b>	02/28/2020
<b>DATE OF REPORT</b>	04/02/2020



<b>CHEMICAL NAMES</b>	2-Methyl-5-(1-methylethyl)phenol, 3-Isopropyl-6-methylphenol, Isothymol, Dentol, p-Cymen-2-ol
<b>CHEMICAL FORMULA</b>	C <sub>10</sub> H <sub>14</sub> O
<b>MOLECULAR WEIGHT (MW)</b>	150.22
<b>CHEMICAL FAMILY</b>	Monoterpenes
<b>CAS NUMBER</b>	[499-75-2]
<b>EC#(EINECS)</b>	207-889-6
<b>RTECS</b>	FI1225000

**ANALYTICAL RESULTS**

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	NA	99.6%
GC	0.700.10.2.METH140	NA	99.6%
NMR	0.700.12.4	Conforms to structure	Conforms to structure
Mass Spectrum	0.700.10.2.METH140	Conforms	Conforms
Residual Solvent*	USP <467>	NA	ND
Water	0.700.12.37	NA	ND
Appearance	NA	NA	Clear liquid

\*Testing performed at an ISO 17025 accredited subcontracted laboratory.

ADJUSTED PURITY: 99.6% IS BASED ON (100 - 0.0 SOLVENTS - 0.0 WATER) X 99.6% GC

**STORAGE CONDITIONS**

<b>STORAGE</b>	+4 °C in a dry place.
<b>EXPIRATION DATE</b>	02/2025 under the above conditions.

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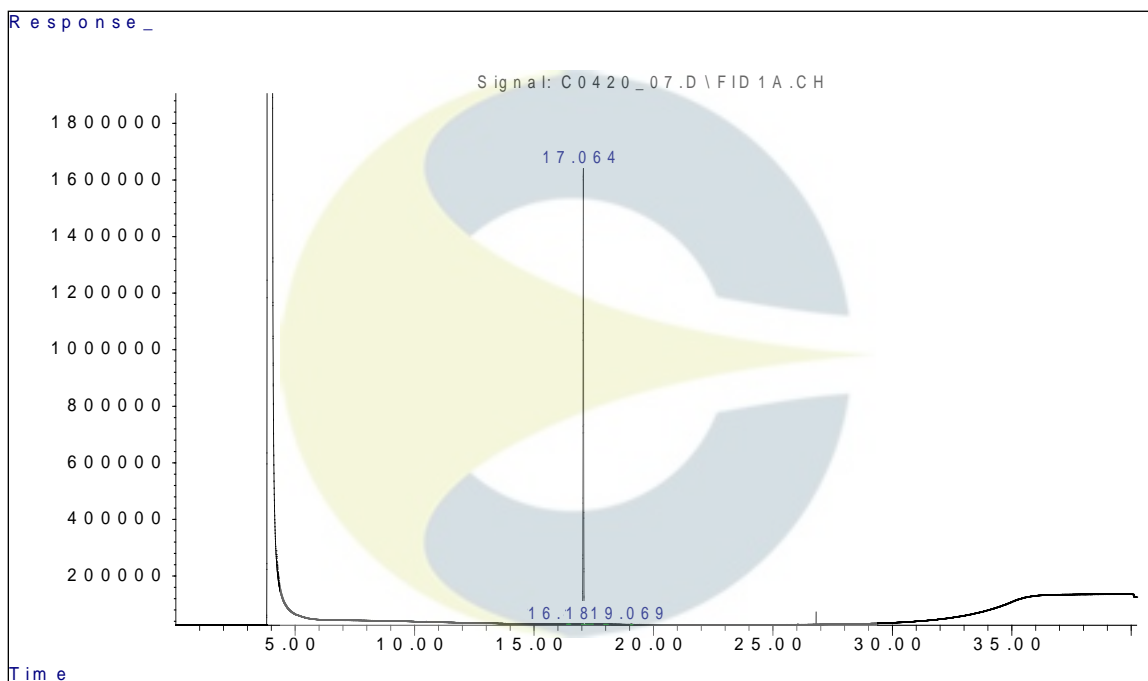
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### ANALYTICAL CONDITIONS

<b>INSTRUMENT</b>	AGILENT 6890N WITH FLAME IONIZATION DETECTOR (FID) AND AGILENT 5973N MASS SELECTIVE DETECTOR (MSD)
<b>COLUMN</b>	Phenomenex Zebron ZB-5HT Inferno, 30 m x 0.32 mm x 0.25 μm; connected to an MXT Y-union, connected to a Restek Siltek deactivated guard column: 10 m x 0.25 mm to FID; and a 5 m x 100 μm transfer line to MSD.
<b>CARRIER GAS</b>	Helium
<b>COLUMN TEMP.</b>	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.
<b>FLOW RATE</b>	2.0 mL/minute
<b>INJECTOR TEMP.</b>	300 °C
<b>INJECTOR SPLIT RATIO</b>	20:1
<b>INJECTION VOL.</b>	1.0 μL
<b>INJECTION CONC.</b>	1.4 mg/mL in Acetonitrile
<b>DETECTION</b>	FID (350 °C) & MSD (Transfer line 300 °C, Source 250 °C, Quad 200 °C)

### GC CHROMATOGRAM OF CARVACROL (CDXP-20-00124)

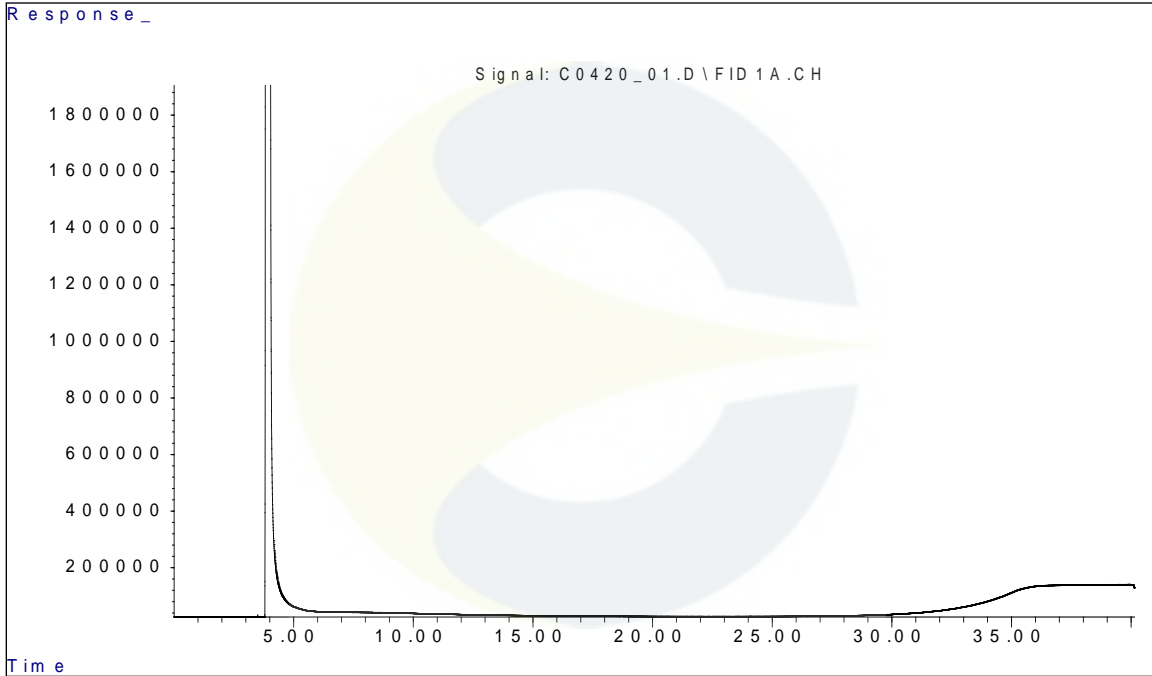


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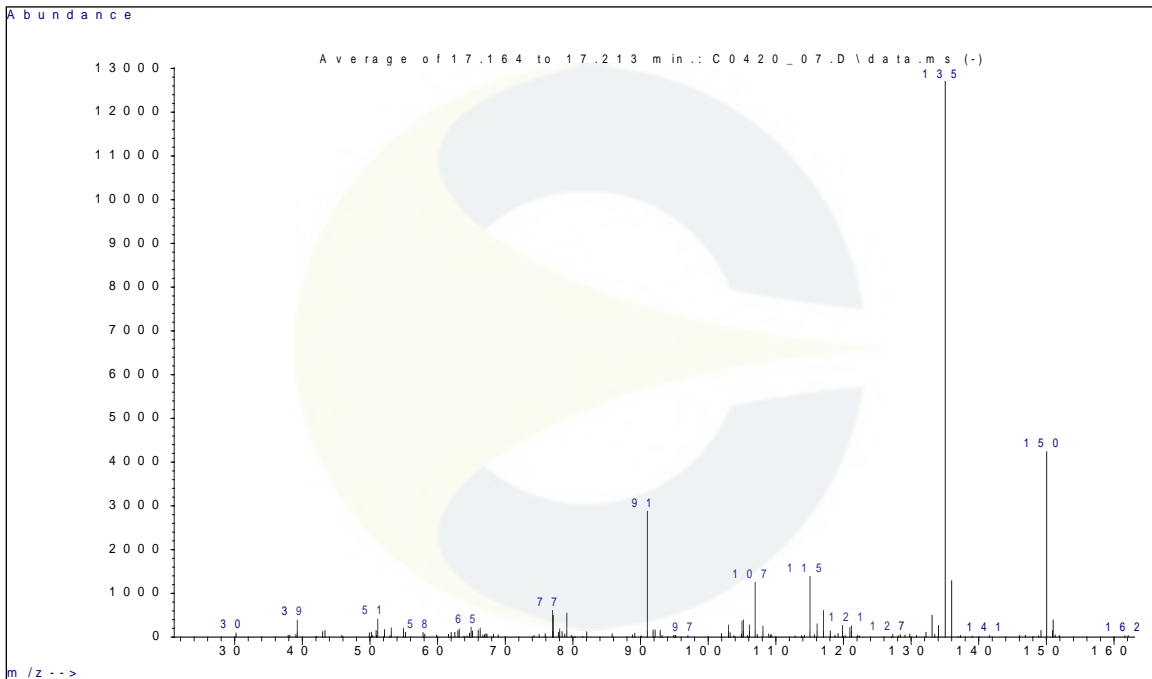
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**GC CHROMATOGRAM OF DILUENT BLANK**



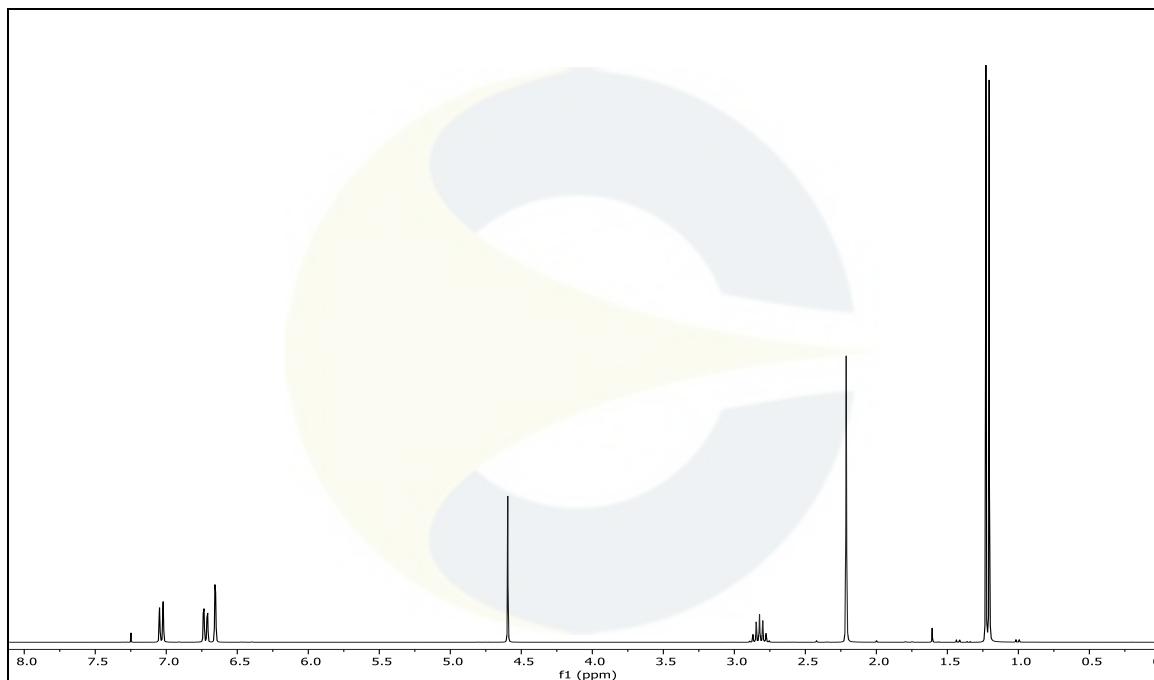
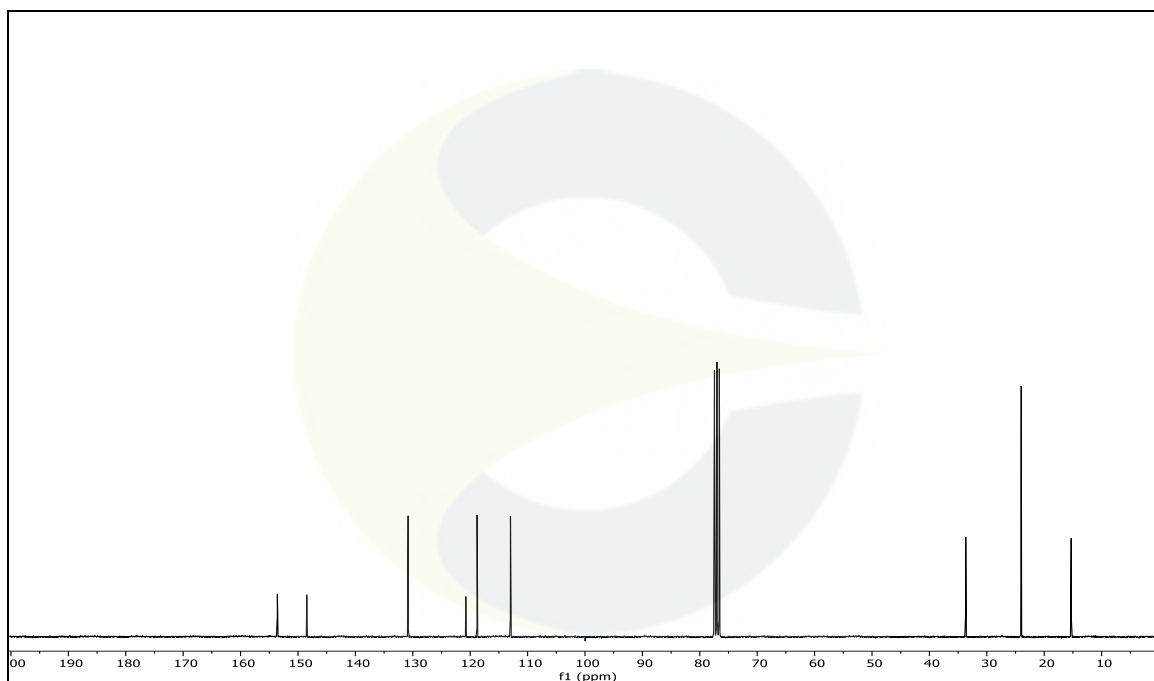
**MASS SPECTRUM OF CARVACROL (CDXP-20-00124)**



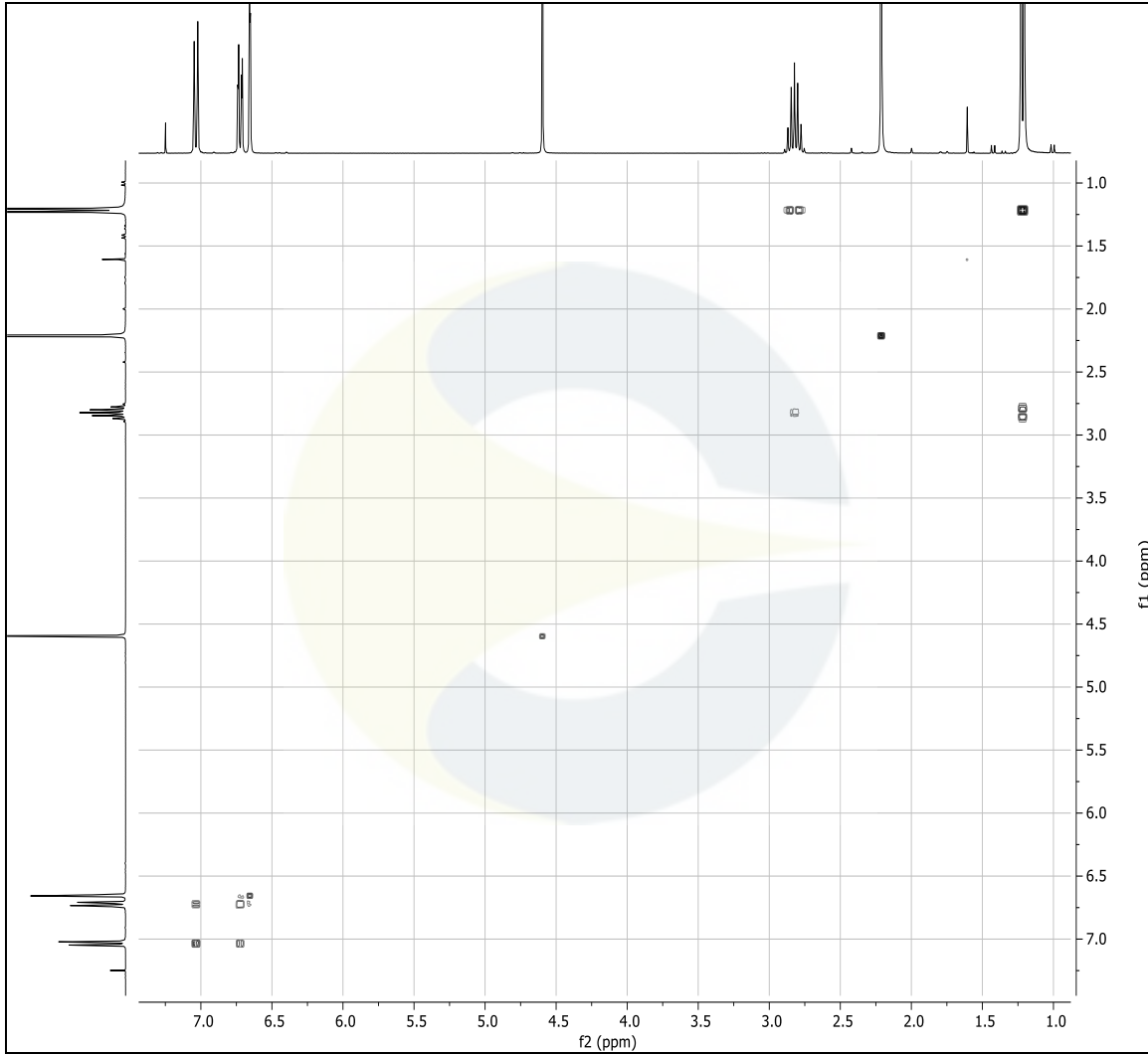
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**<sup>1</sup>H-NMR SPECTRUM OF CARVACROL (CDXP-20-00124) IN CDCl<sub>3</sub> + TMS****<sup>13</sup>C-NMR SPECTRUM OF CARVACROL (CDXP-20-00124) IN CDCl<sub>3</sub> + TMS**

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**COSY-NMR SPECTRUM OF CARVACROL (CDXP-20-00124) IN CDCl<sub>3</sub> + TMS**

**REVISION HISTORY**

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	04/02/2020	New report

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