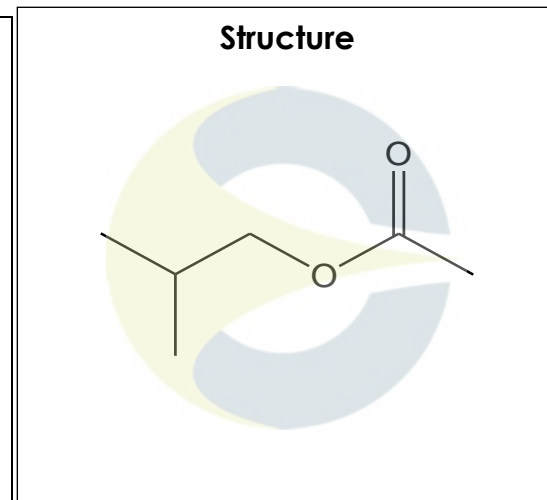


Certificate of Analysis
For Laboratory Use Only

PRODUCT NAME	Isobutyl acetate
PART NUMBER	00009199
STANDARD TYPE	Analytical Standard (AS)
LOT NUMBER	00009199-C01
REPORT NUMBER	CDXA-RSS-6550-01
SAMPLE NUMBER	CDXA-15-0863
DATE OF SAMPLE	02/03/2015
DATE OF RE-EVALUATION	09/15/2020
DATE OF REPORT	10/09/2020



CHEMICAL NAMES	Isobutyl ester acetic acid; 2-Methylpropyl acetate; β -Methylpropyl ethanoate
CHEMICAL FORMULA	C ₆ H ₁₂ O ₂
MOLECULAR WEIGHT (MW)	116.16
CHEMICAL FAMILY	Carboxylic acid esters
CAS NUMBER	[110-19-0]
EC#(EINECS)	203-745-1
RTECS	AI4025000

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
GC	0.700.10.2.METH140	≥ 75%	99.9%
Mass Spectrum	0.700.10.2.METH140	Conforms	Conforms
Appearance	NA	NA	Liquid

STORAGE CONDITIONS

STORAGE	+4 °C in a dry place.
EXPIRATION DATE	09/2025 under the above conditions.

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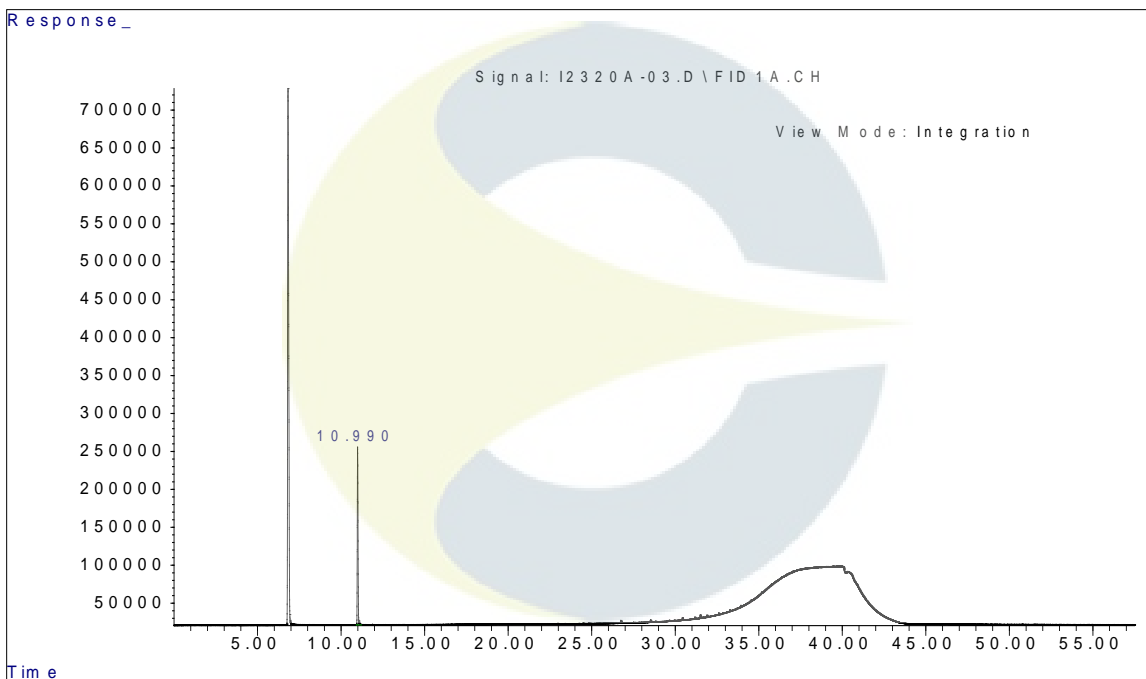
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ANALYTICAL CONDITIONS

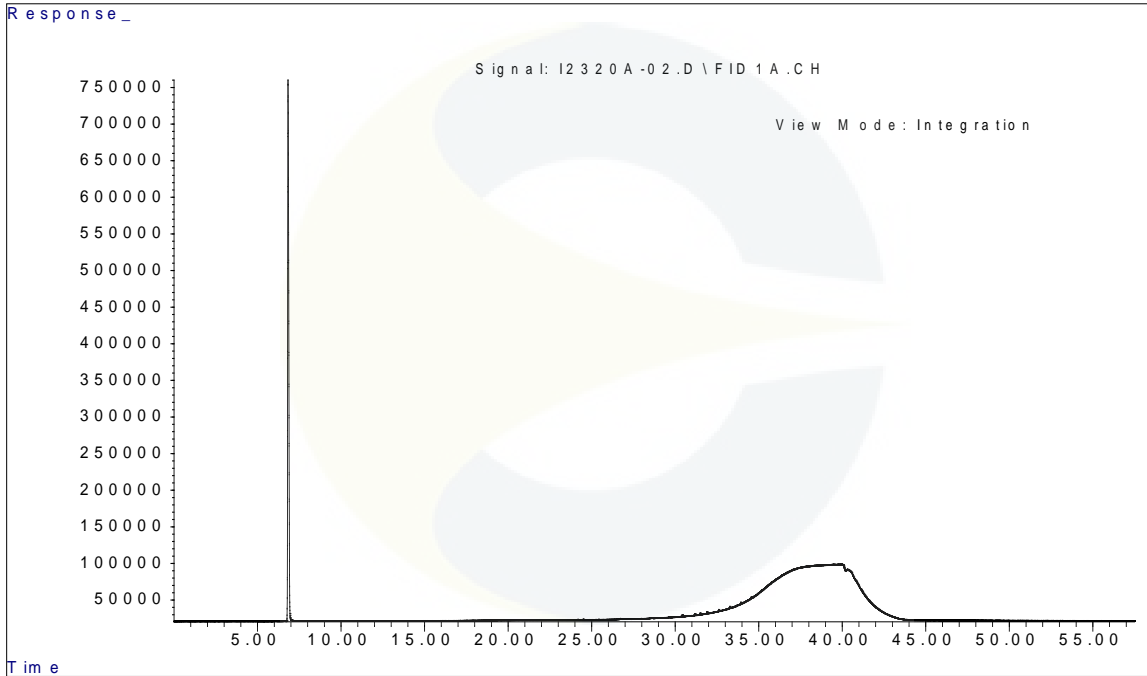
INSTRUMENT	AGILENT 6890N WITH FLAME IONIZATION DETECTOR (FID) AND AGILENT 5973N MASS SELECTIVE DETECTOR (MSD)
COLUMN	Phenomenex Zebron ZB-5 plus , 30 m x 0.32 mm x 0.25 µm; connected to an MXT Y-union, connected to a Restek Siltek deactivated guard column: 10 m x 0.25 mm to FID; and a 5 m x 100 µm transfer line to MSD.
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.	1.0 mg/mL in Carbon disulfide
DETECTION	FID (350 °C) & MSD (Transfer line 300 °C, Source 250 °C, Quad 200 °C)

GC CHROMATOGRAM OF ISOBUTYL ACETATE (CDXA-15-0863)

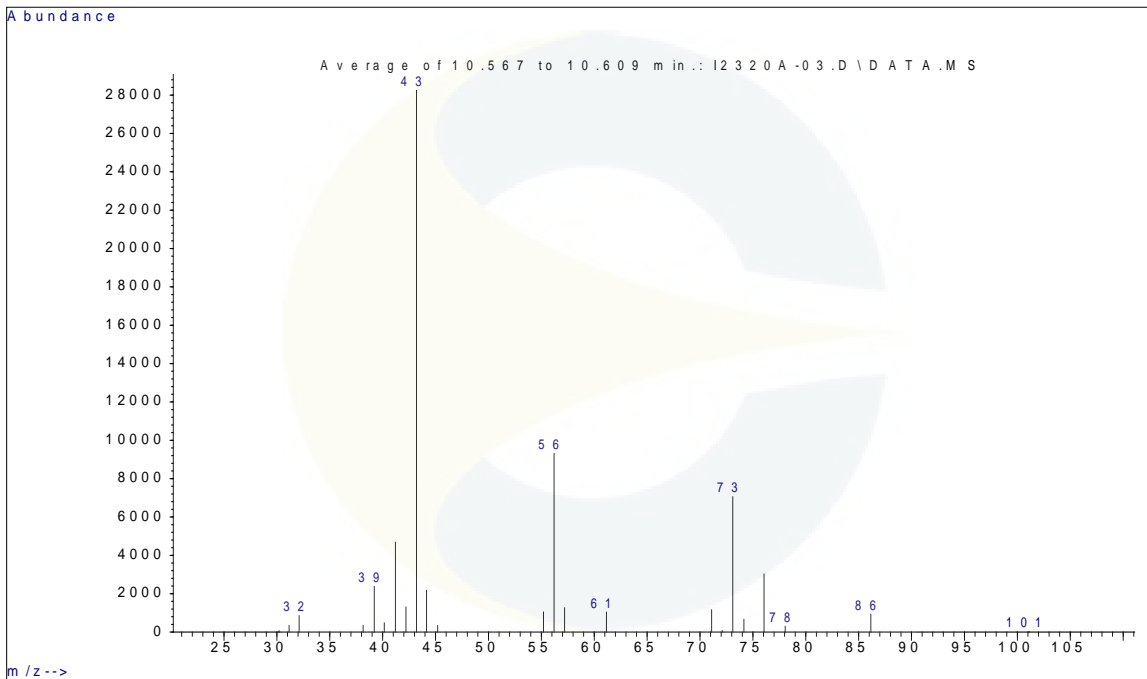


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GC CHROMATOGRAM OF DILUENT BLANK



MASS SPECTRUM OF ISOBUTYL ACETATE (CDXA-15-0863)



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REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	0/23/2015	New report
01	10/09/2020	Passed re-evaluation by GC/MS. Updated expiration date, chemical family, analytical conditions, chromatograms and results. Added Mass spec data in place of NMR and removed melting point.

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