


**Certificate of Analysis**
*For Laboratory Use Only*

<b>PRODUCT NAME</b>	Dodeca-2(E),4(E)-dienoic acid isobutylamide	<b>Structure</b> 
<b>PART NUMBER</b>	00004951	
<b>STANDARD TYPE</b>	Primary (P)	
<b>LOT NUMBER</b>	00004951-74B	
<b>REPORT NUMBER</b>	CDXA-RSS-8477-00	
<b>SAMPLE NUMBER</b>	CDXP-19-00020	
<b>DATE OF SAMPLE</b>	01/15/2019	
<b>DATE OF REPORT</b>	02/07/2019	

<b>CHEMICAL NAMES</b>	(2E,4E)-N-(2-methylpropyl)-2,4-Dodecadienamide; Kalecide
<b>CHEMICAL FORMULA</b>	C <sub>16</sub> H <sub>29</sub> NO
<b>MOLECULAR WEIGHT (MW)</b>	251.41
<b>CHEMICAL FAMILY</b>	Isobutylamides
<b>CAS NUMBER</b>	[24738-51-0]
<b>EC#(EINECS)</b>	NA
<b>RTECS</b>	NA

**ANALYTICAL RESULTS**

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	NA	93.0%
HPLC	99.1-04-1.0-000684	NA	94.8%
NMR	30.1-04-1.0-000733	Conforms to structure	Conforms to structure
Mass Spectrum	99.1-04-3.0-000126	Conforms	Conforms
Residual Solvent	99.1-CDXA-3.0-000621	NA	Heptane – 0.1%; n-Hexane < 0.1%; Isopropyl alcohol < 0.1%; Acetone < 0.1%
Water	99.1-04-10.0-000094	NA	1.8%
Appearance	NA	NA	Off white flakes

ADJUSTED PURITY: 93.0% IS BASED ON (100 - 0.1 SOLVENTS - 1.8 WATER) X 94.8% HPLC

**STORAGE CONDITIONS**

<b>STORAGE</b>	-20 °C in a dry place.
<b>EXPIRATION DATE</b>	01/2024 under the above conditions.

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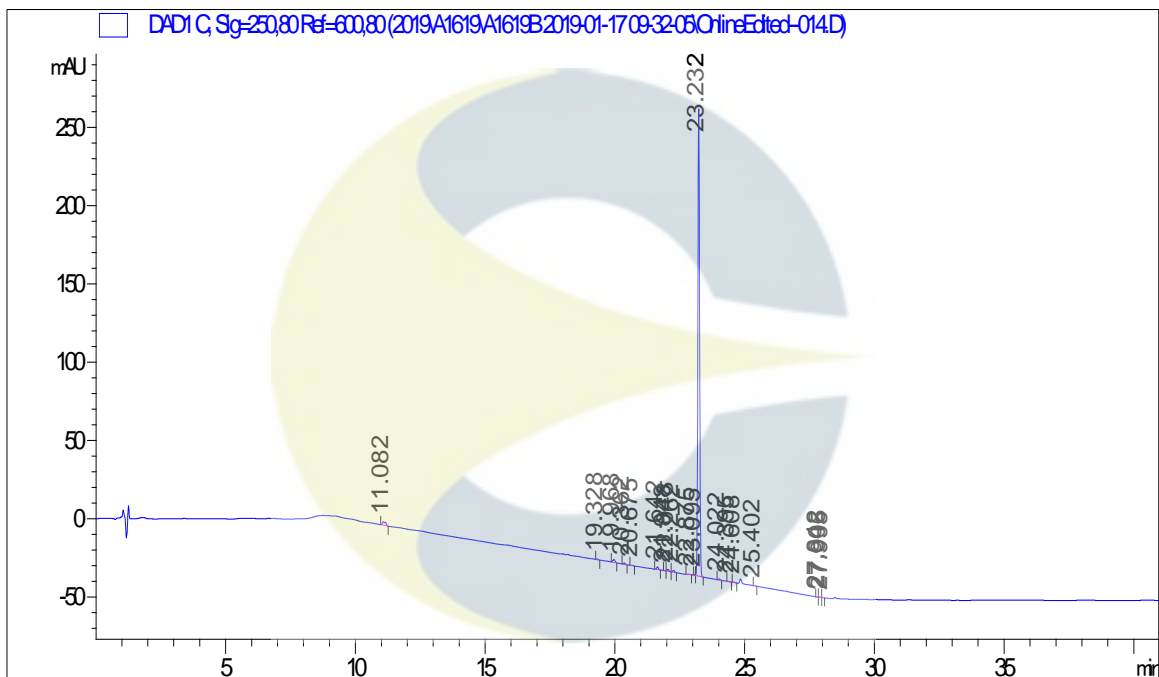
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## ANALYTICAL CONDITIONS

<b>INSTRUMENT</b>	AGILENT 1260 HPLC UV-VIS (DAD); AB-SCIEX 6600 TRIPLE TOF
<b>COLUMN</b>	Phenomenex Luna C18(2) 150 x 2.00 mm, 5 µm particle size
<b>MOBILE PHASE</b>	A - 0.1% Trifluoroacetic acid in Ultrapure water, B - Acetonitrile; Isocratic 5% B for 5 minutes, then increasing to 95% B over 20 minutes. Hold at 95% B for 15 minutes, then decreasing to 5% B over 1 minute.
<b>COLUMN TEMP.</b>	60 °C
<b>FLOW RATE</b>	0.4 mL/minute
<b>INJECTION VOL.</b>	0.2 µL
<b>INJECTION CONC.</b>	1.1 mg/mL in Methanol
<b>DETECTION</b>	250 ± 40 nm

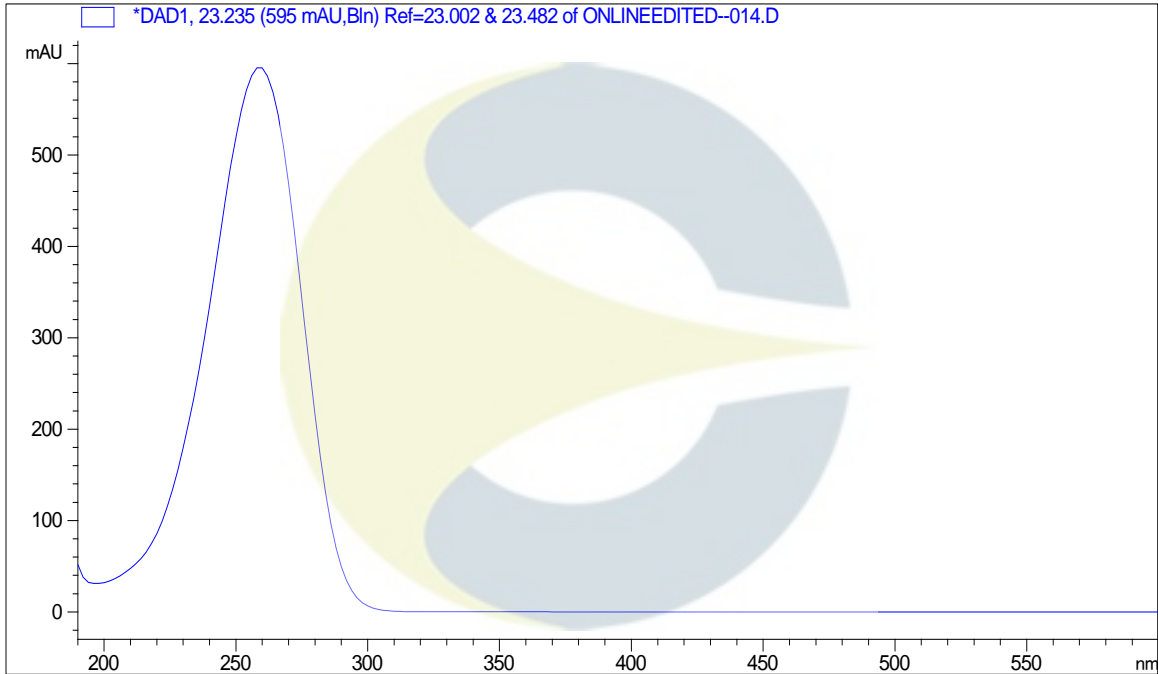
## HPLC CHROMATOGRAM OF DODECA-2(E),4(E)-DIENOIC ACID ISOBUTYLAMIDE (CDXP-19-00020)



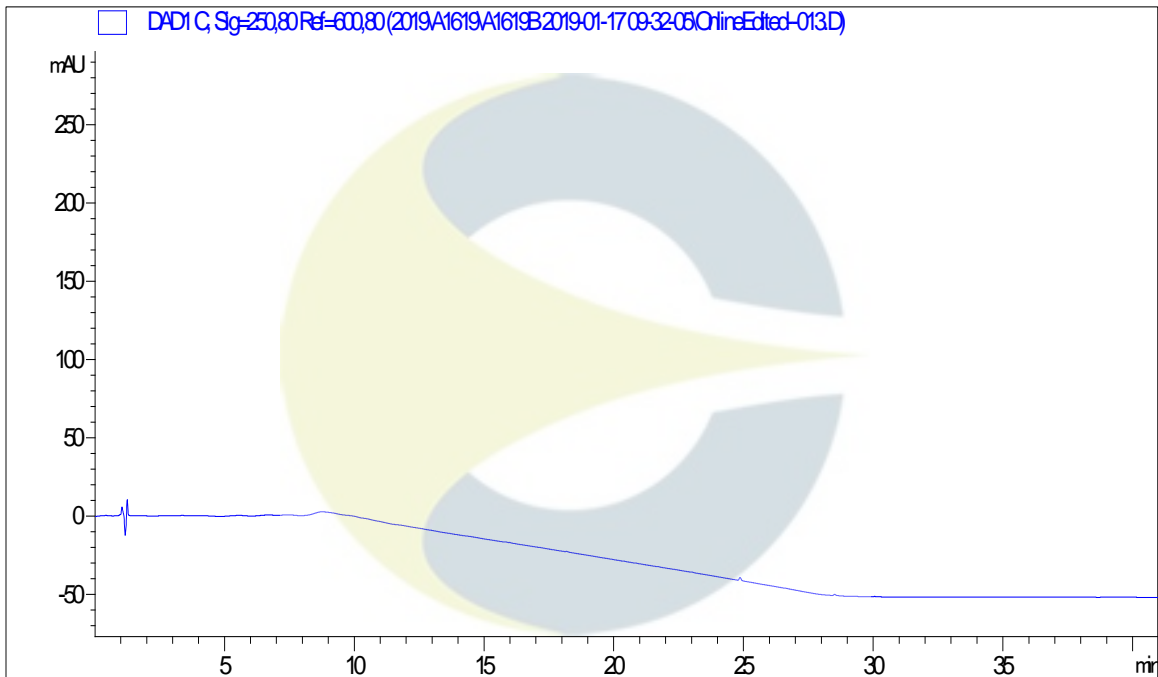
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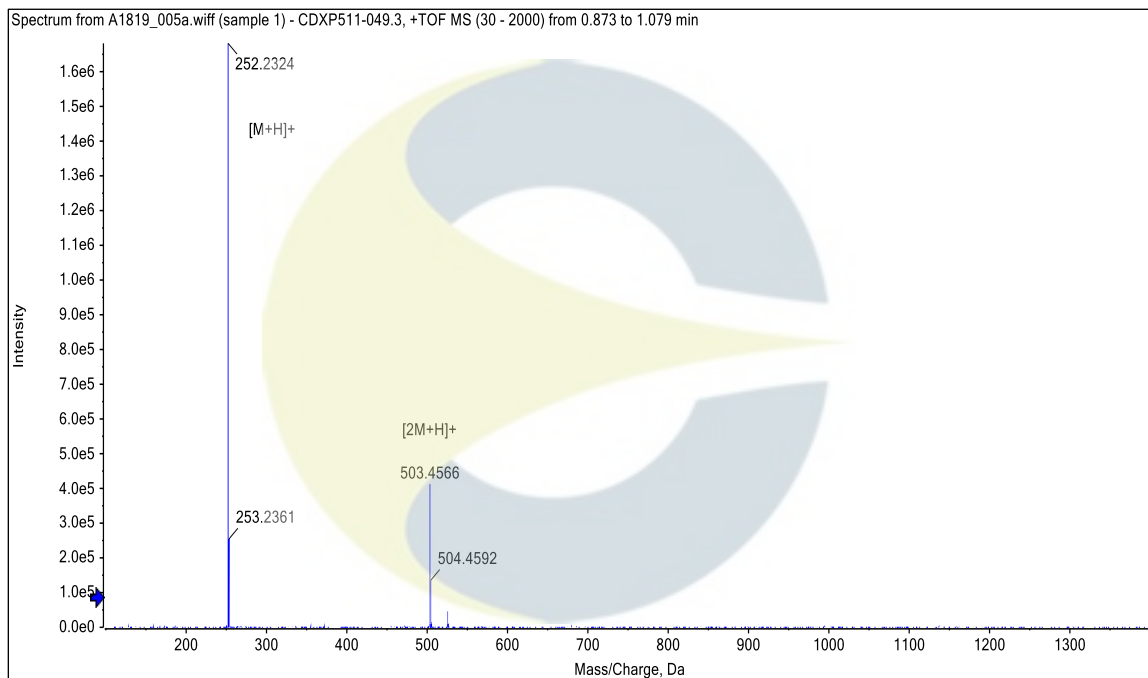
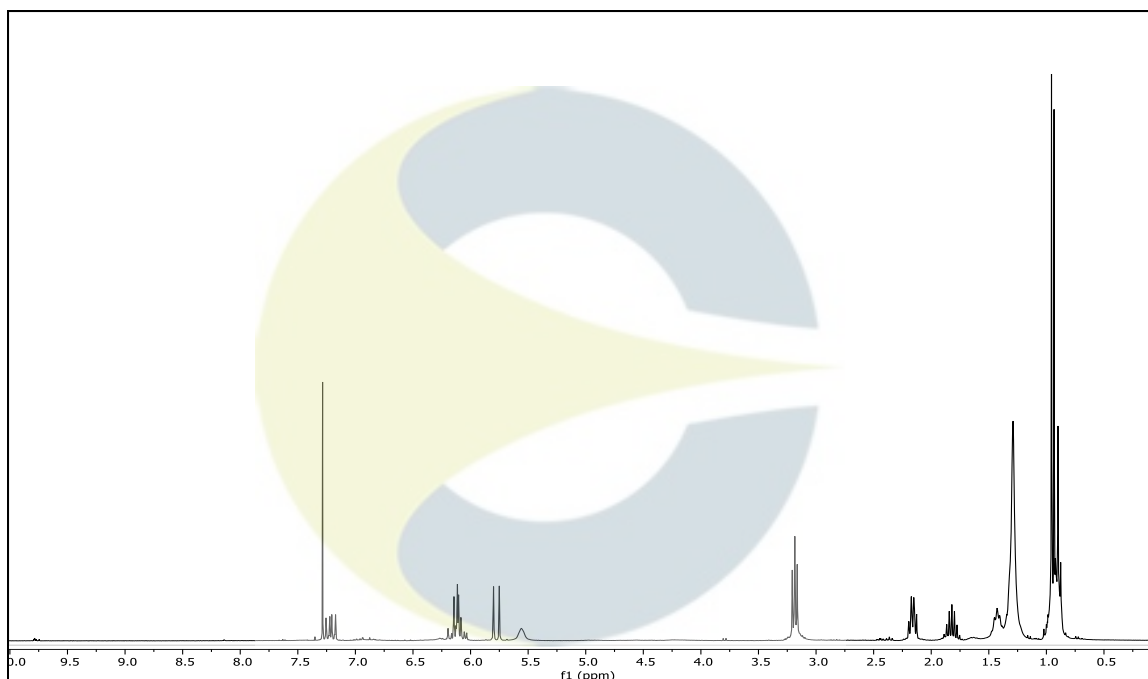
**UV SPECTRUM AT RT = 23.2 MINUTES**



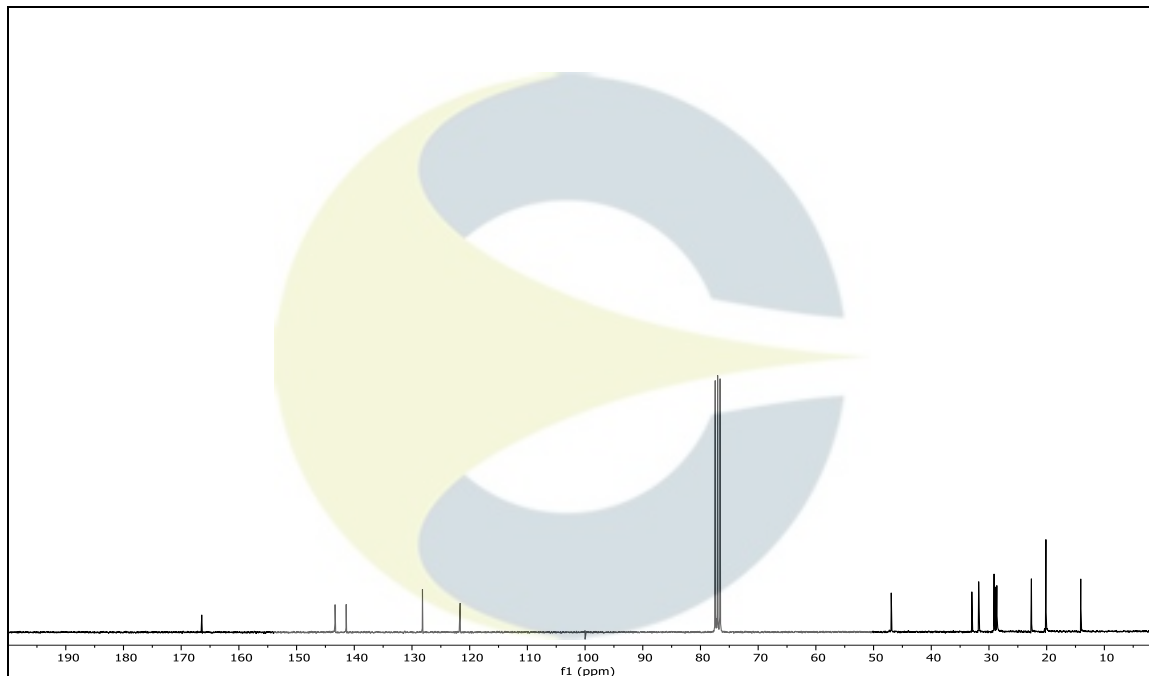
**HPLC CHROMATOGRAM OF DILUENT BLANK**



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**MASS SPECTRUM OF DODECA-2(E),4(E)-DIENOIC ACID ISOBUTYLAMIDE (CDXP-19-00020)**

**<sup>1</sup>H-NMR SPECTRUM OF DODECA-2(E),4(E)-DIENOIC ACID ISOBUTYLAMIDE (CDXP-19-00020) IN CDCl<sub>3</sub>**


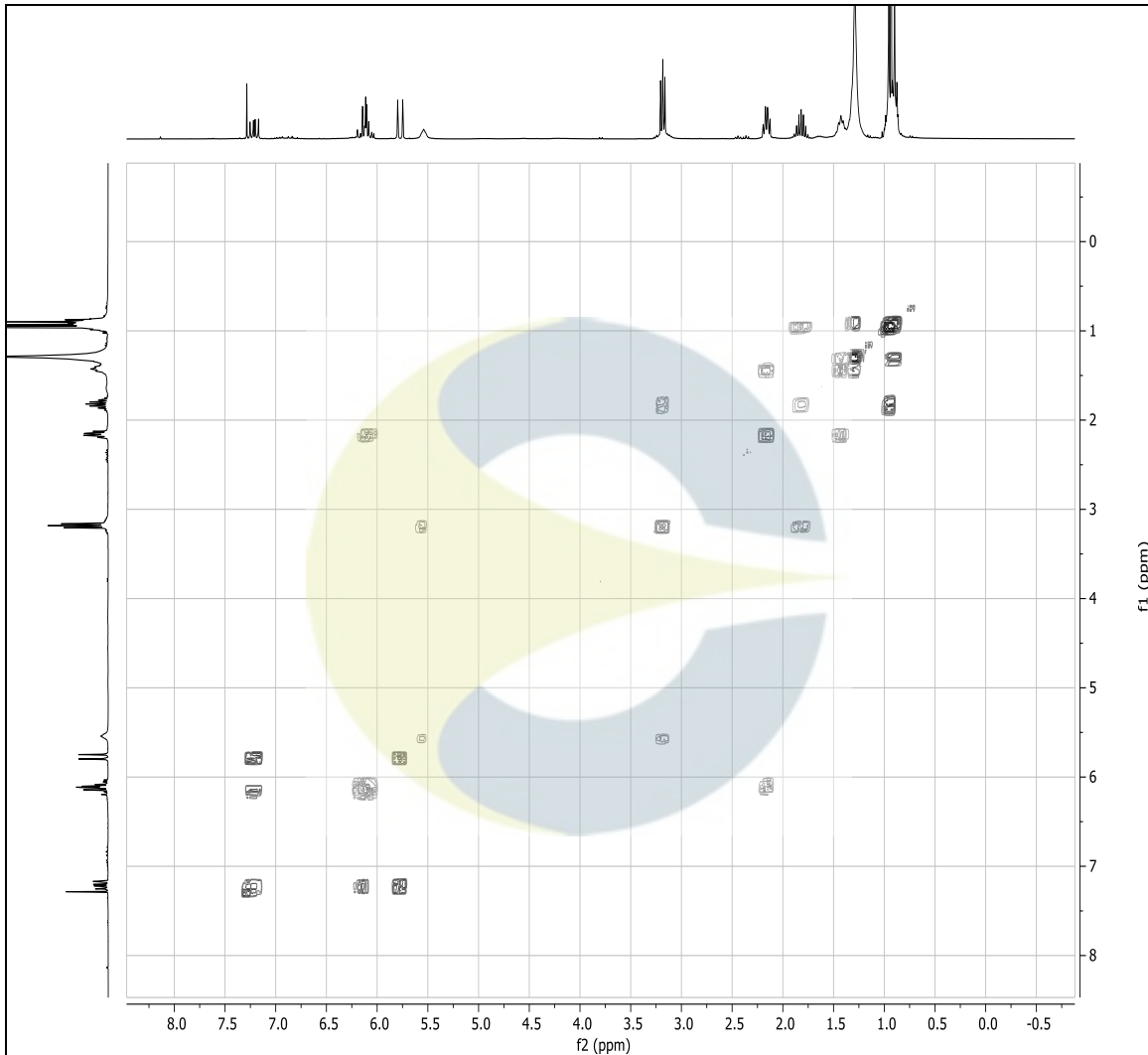
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**<sup>13</sup>C-NMR SPECTRUM DODECA-2(E),4(E)-DIENOIC ACID ISOBUTYLAMIDE (CDXP-19-00020) IN CDCl<sub>3</sub>**

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**COSY-NMR SPECTRUM OF DODECA-2(E),4(E)-DIENOIC ACID ISOBUTYLAMIDE (CDXP-19-00020) IN CDCl<sub>3</sub>**



**REVISION HISTORY**

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	02/07/2019	New report

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