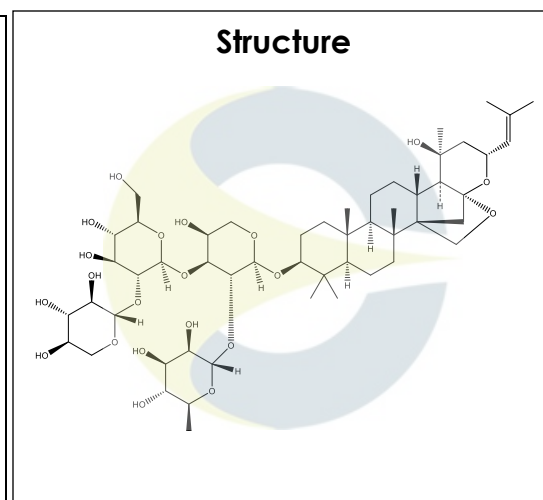


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<b>PRODUCT NAME</b>	Jujuboside B
<b>PART NUMBER</b>	00010526
<b>STANDARD TYPE</b>	Primary (P)
<b>LOT NUMBER</b>	00010526-812
<b>REPORT NUMBER</b>	CDXA-RSS-7288-01
<b>SAMPLE NUMBER</b>	CDXP-16-012193
<b>DATE OF SAMPLE</b>	09/22/2016
<b>DATE OF RE-EVALUATION</b>	10/19/2020
<b>DATE OF REPORT</b>	11/02/2020



<b>CHEMICAL NAMES</b>	(3 $\beta$ ,16 $\beta$ ,23R)-16,23:16,30-diepoxy-20-hydroxydammar-24-en-3-yl O-6-deoxy- $\alpha$ -L-mannopyranosyl-(1 $\rightarrow$ 2)-O-[O- $\beta$ -D-xylopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)]- $\alpha$ -L-Arabinopyranoside
<b>CHEMICAL FORMULA</b>	C <sub>52</sub> H <sub>84</sub> O <sub>21</sub>
<b>MOLECULAR WEIGHT (MW)</b>	1045.21
<b>CHEMICAL FAMILY</b>	Saponins
<b>CAS NUMBER</b>	[55466-05-2]
<b>EC#(EINECS)</b>	683-207-4
<b>RTECS</b>	NA

**ANALYTICAL RESULTS**

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	87.8%
HPLC	0.700.10.2.METH22	≥ 90%	98.7%
NMR	4.5.3-CD-4.0-000338	Conforms to structure	Conforms to structure
Mass Spectrum	99.1-CDXA-2.0-000126	Conforms	Conforms
Residual Solvent*	99.1-CD-9.0-000115	NA	EtOH < 0.1 %
Water	0.700.12.37	NA	10.9%
Appearance	NA	NA	White powder

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

ADJUSTED PURITY: 87.8% IS BASED ON (100 - 0.1 SOLVENTS - 10.9 WATER) X 98.7% HPLC

**STORAGE CONDITIONS**

<b>STORAGE</b>	-20 °C in a dry place.
<b>EXPIRATION DATE</b>	10/2025 under the above conditions.

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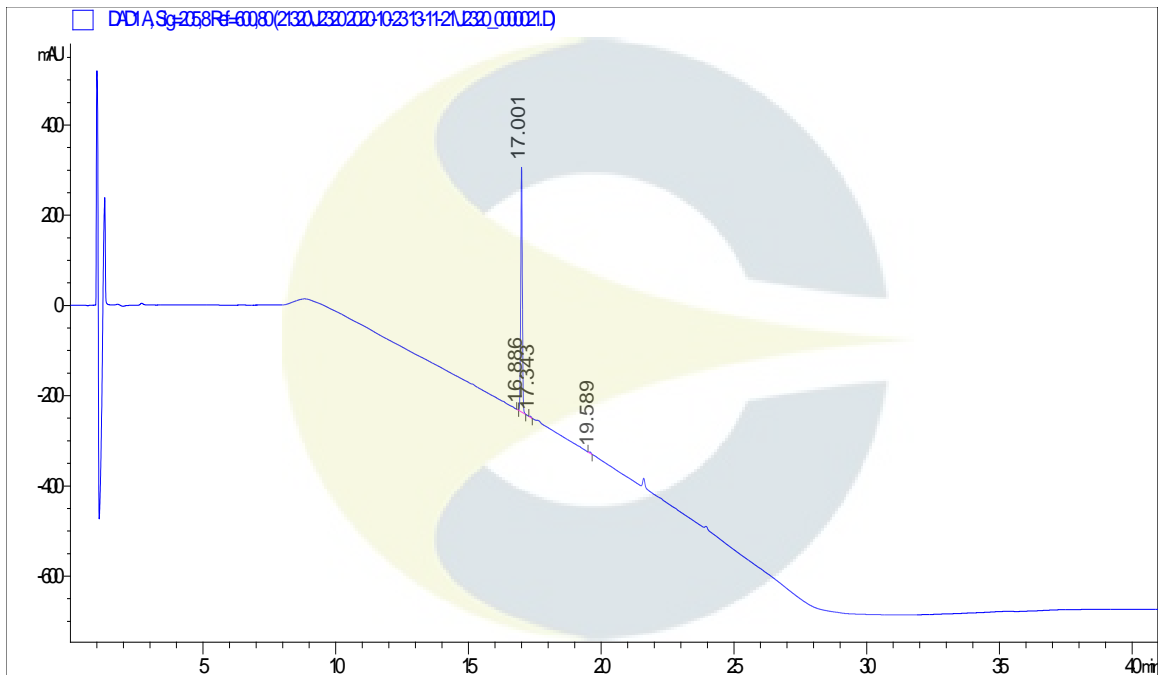
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## ANALYTICAL CONDITIONS

<b>INSTRUMENT</b>	AGILENT 1260 HPLC UV-VIS (DAD); AGILENT 1100 ION TRAP
<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.
<b>COLUMN TEMP.</b>	60 °C
<b>FLOW RATE</b>	0.4 mL/minute
<b>INJECTION VOL.</b>	4.0 µL
<b>INJECTION CONC.</b>	1.1 mg/mL in Methanol
<b>DETECTION</b>	205 ± 4 nm

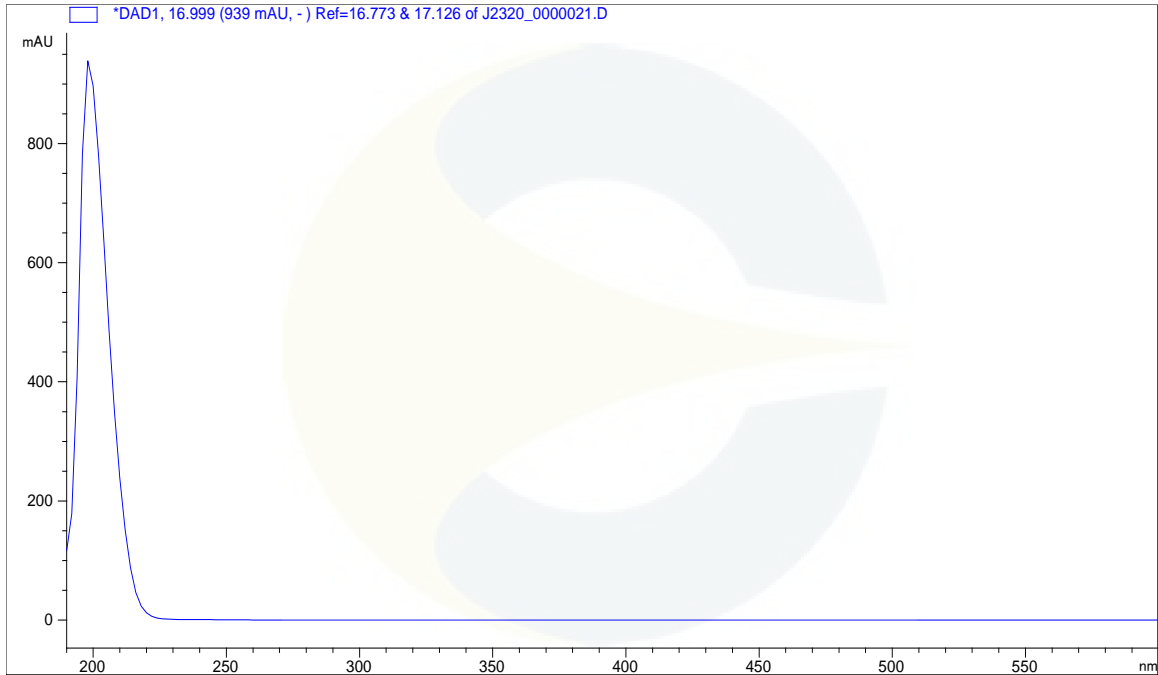
## HPLC CHROMATOGRAM OF JUJUBOSIDE B (CDXP-16-012193)



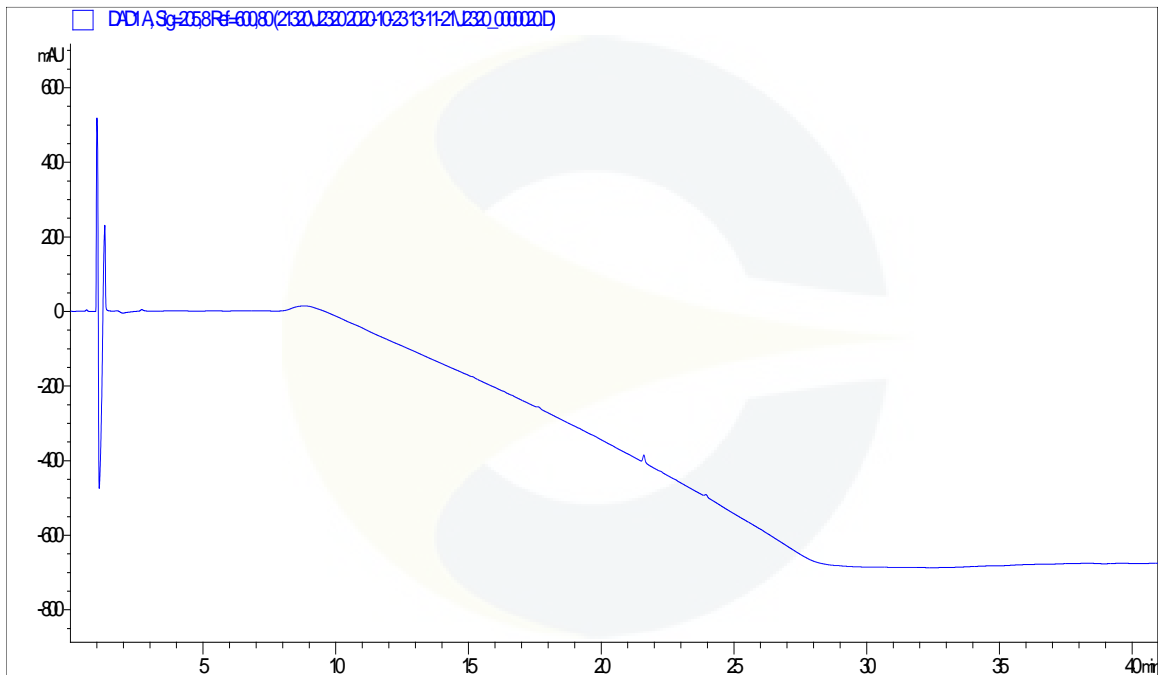
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**UV SPECTRUM AT RT = 17.0 MINUTES**

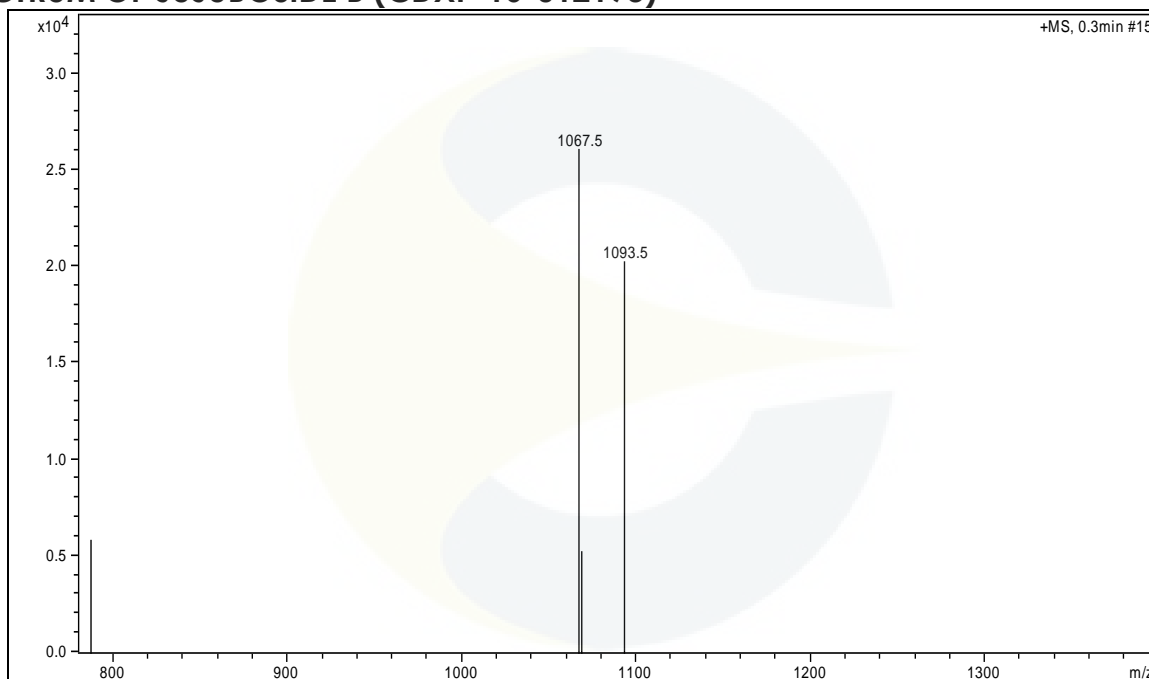


**HPLC CHROMATOGRAM OF DILUENT BLANK**

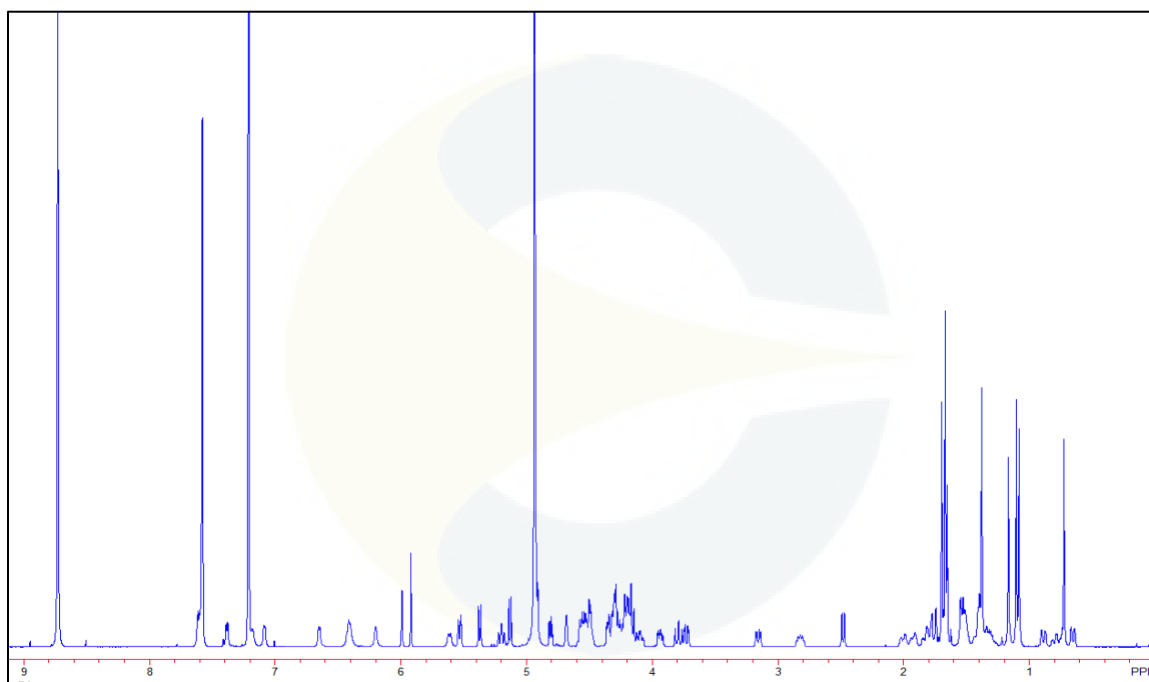


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**MASS SPECTRUM OF JUJUBOSIDE B (CDXP-16-012193)**

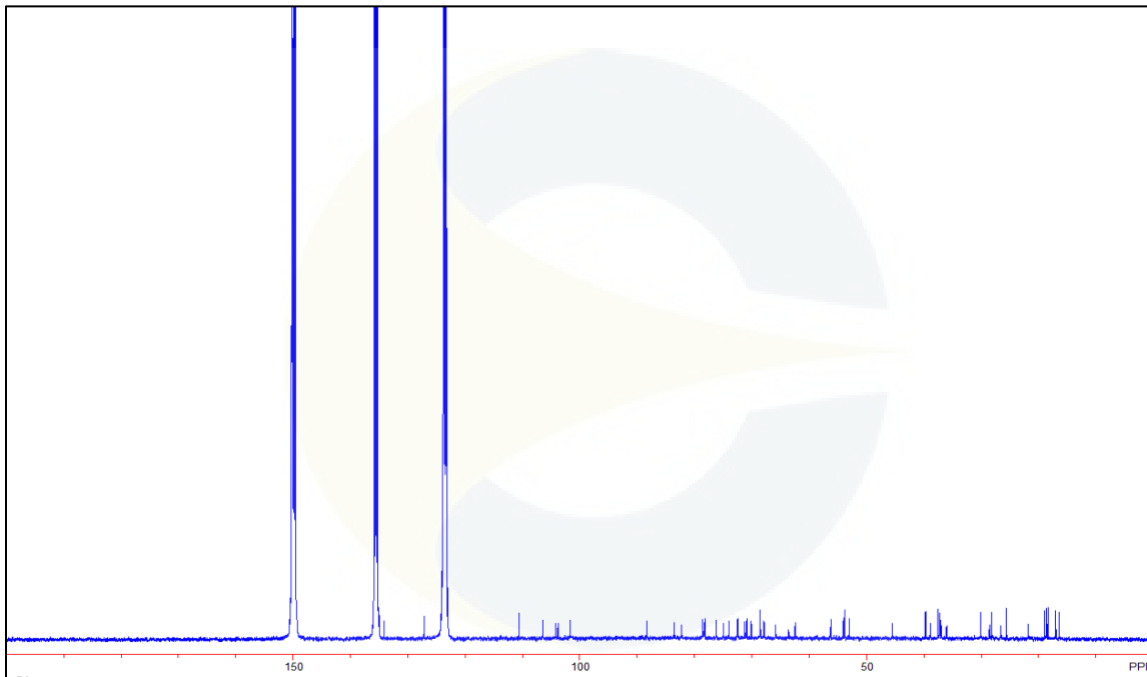


**<sup>1</sup>H-NMR SPECTRUM OF JUJUBOSIDE B (CDXP-16-012193) IN PYRIDINE-d<sub>5</sub>**

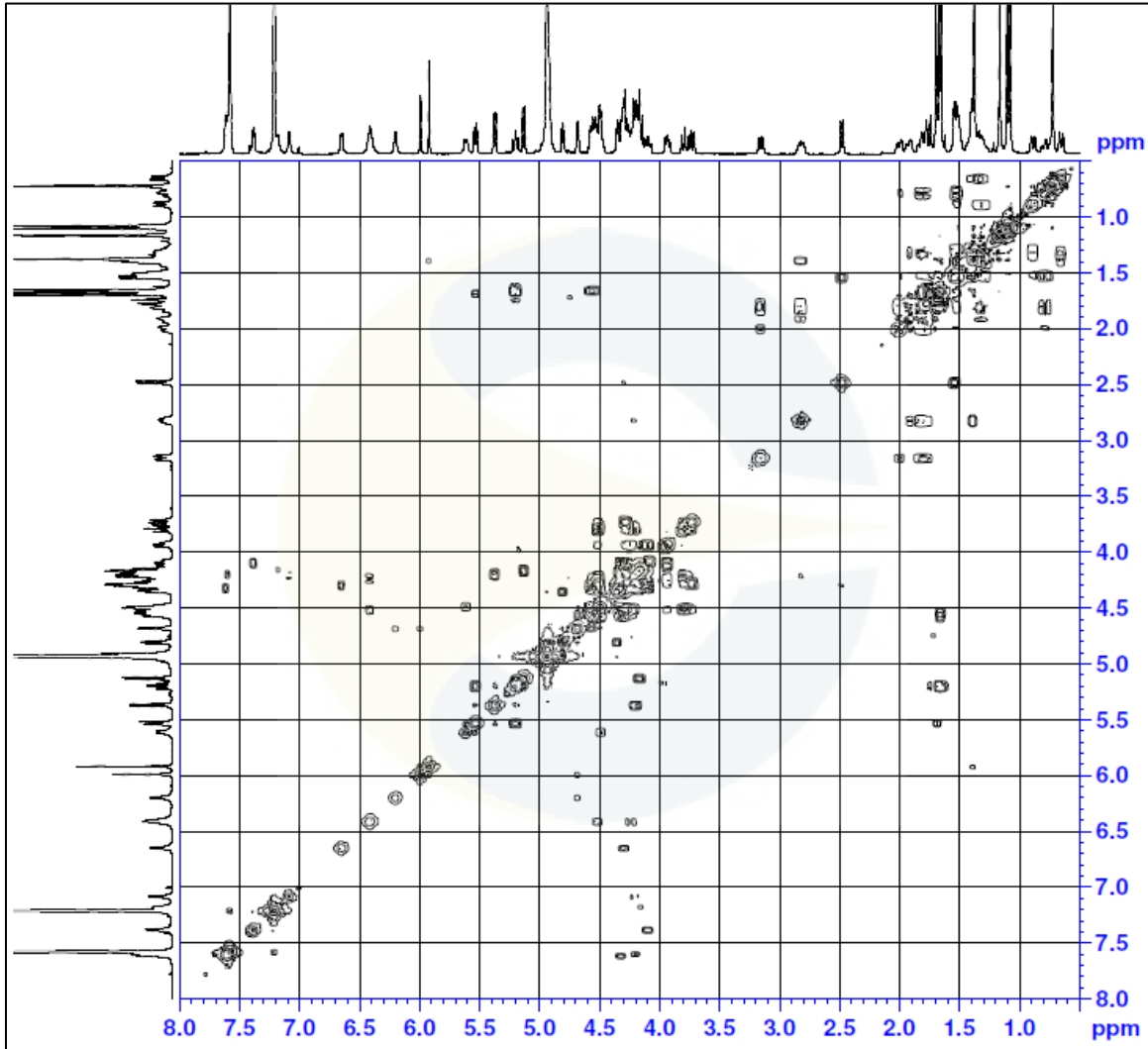


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<sup>13</sup>C-NMR SPECTRUM OF JUJUBOSIDE B (CDXP-16-012193) IN PYRIDINE-d<sub>5</sub>



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**COSY-NMR SPECTRUM OF JUJUBOSIDE B (CDXP-16-012193) IN PYRIDINE-*d*<sub>5</sub>**

**REVISION HISTORY**

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	10/14/2016	New report
01	11/02/2020	Passed re-evaluation by HPLC, KF. Updated expiration date, analytical conditions, chromatograms and results. Removed melting point and added EINECS number.

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