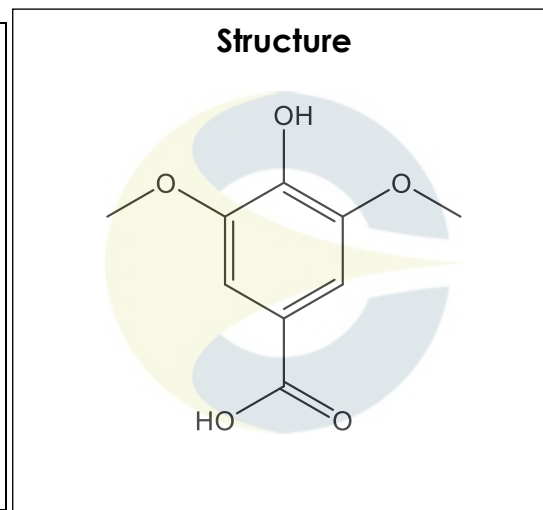


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<b>PRODUCT NAME</b>	Syringic acid
<b>PART NUMBER</b>	00019454
<b>STANDARD TYPE</b>	Primary (P)
<b>LOT NUMBER</b>	00019454-014
<b>REPORT NUMBER</b>	CDXA-RSS-3285-02
<b>SAMPLE NUMBER</b>	CDXA-09-0840
<b>DATE OF SAMPLE</b>	02/25/2009
<b>DATE OF RE-EVALUATION</b>	08/26/2013 (1 <sup>st</sup> ); 03/05/2021 (2 <sup>nd</sup> )
<b>DATE OF REPORT</b>	03/25/2021



<b>CHEMICAL NAMES</b>	4-Hydroxy-3,5-dimethoxy-benzoic acid; 3,5-Dimethoxy-4-hydroxybenzoic acid; Cedar acid; Gallic acid 3,5-dimethyl ether
<b>CHEMICAL FORMULA</b>	C <sub>9</sub> H <sub>10</sub> O <sub>5</sub>
<b>MOLECULAR WEIGHT (MW)</b>	198.17
<b>CHEMICAL FAMILY</b>	Phenolic acids
<b>CAS NUMBER</b>	[530-57-4]
<b>EC#(EINECS)</b>	208-486-8
<b>RTECS</b>	DH2090000

**ANALYTICAL RESULTS**

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	98.7%
HPLC	0.700.10.2.METH22	≥ 90%	98.7%
NMR	0.700.12.4	Conforms to structure	Conforms to structure
Mass Spectrum	Direct Infusion, ESI (-)	Conforms	Conforms
Residual Solvent*	99.1-CD-3.0-000115	NA	ND
Water	0.700.12.37	NA	ND
Appearance	NA	NA	Brown powder

ADJUSTED PURITY: 98.7% IS BASED ON (100 - 0.0 SOLVENTS - 0.0 WATER) X 98.7% HPLC

**STORAGE CONDITIONS**

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

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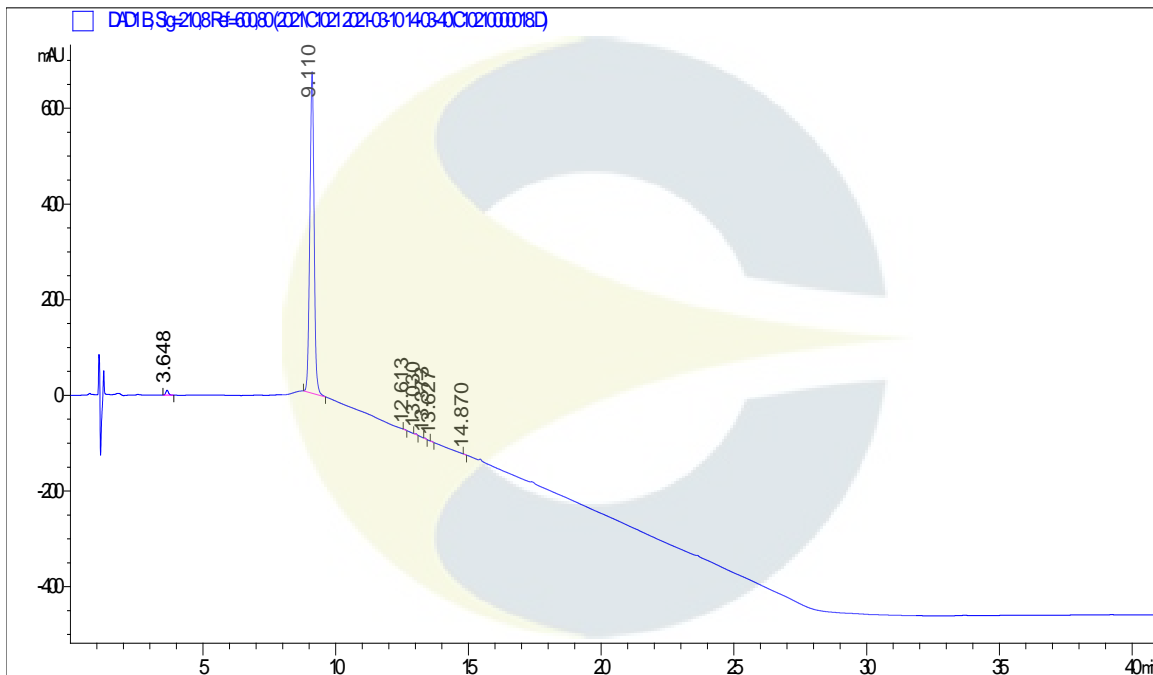
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## ANALYTICAL CONDITIONS

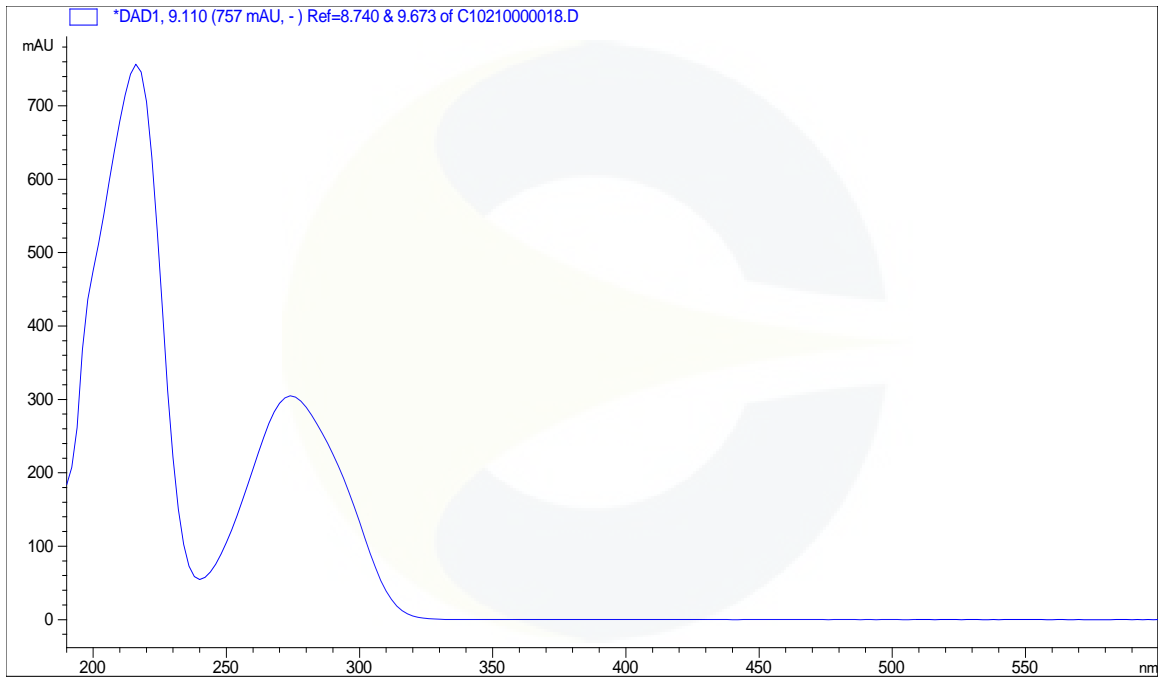
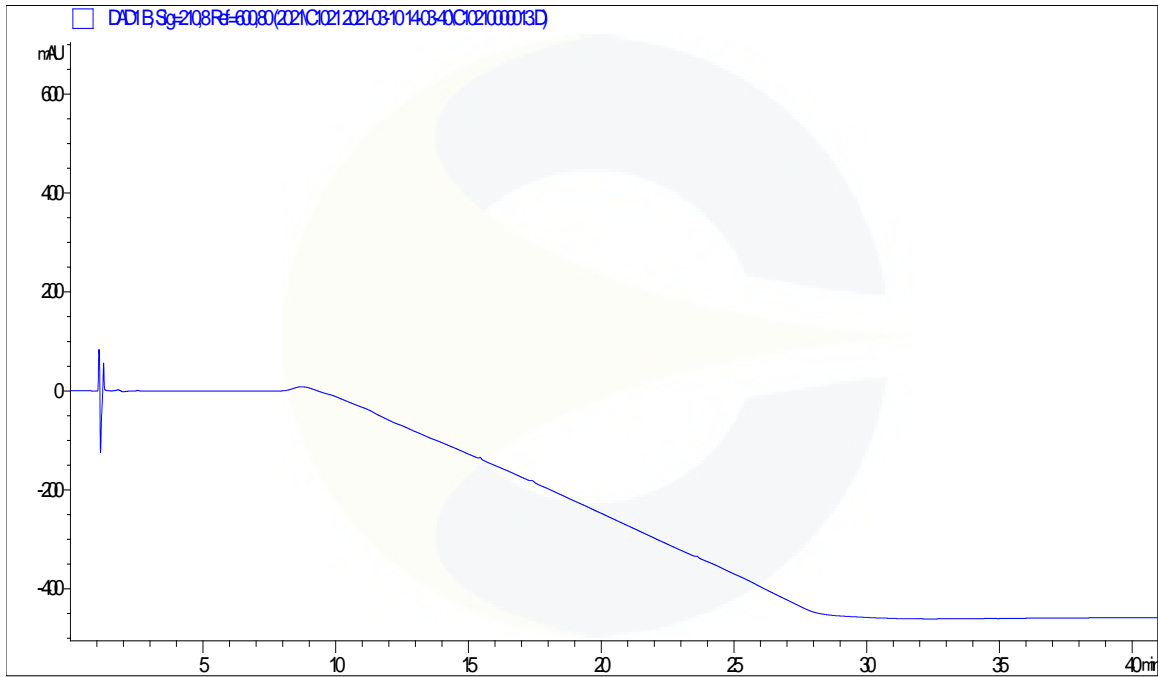
<b>INSTRUMENT</b>	AGILENT 1260 HPLC UV-VIS (DAD); FINNIGAN LCQ-DECA
<b>COLUMN</b>	Phenomenex Luna C18(2) 150 x 2.00 mm, 5 µm particle size
<b>MOBILE PHASE</b>	A - 0.1% Trifluoroacetic acid in Ultrapure water, B - Acetonitrile; Isocratic 5% B for 5 minutes, then increasing to 95% B over 20 minutes. Hold at 95% B for 15 minutes.
<b>COLUMN TEMP.</b>	60 °C
<b>FLOW RATE</b>	0.4 mL/minute
<b>INJECTION VOL.</b>	0.4 µL
<b>INJECTION CONC.</b>	1.0 mg/mL in Methanol
<b>DETECTION</b>	210 ± 4 nm

## HPLC CHROMATOGRAM OF SYRINGIC ACID (CDXA-09-0840)



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**UV SPECTRUM AT RT = 9.1 MINUTES**

**HPLC CHROMATOGRAM OF DILUENT BLANK**


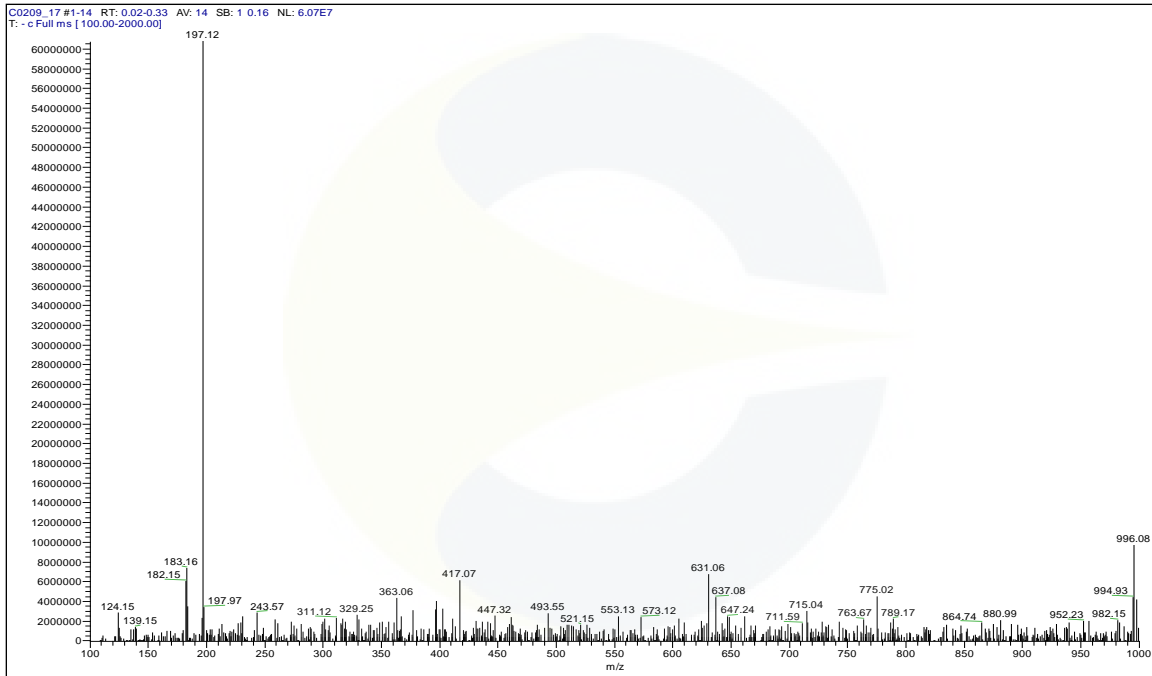
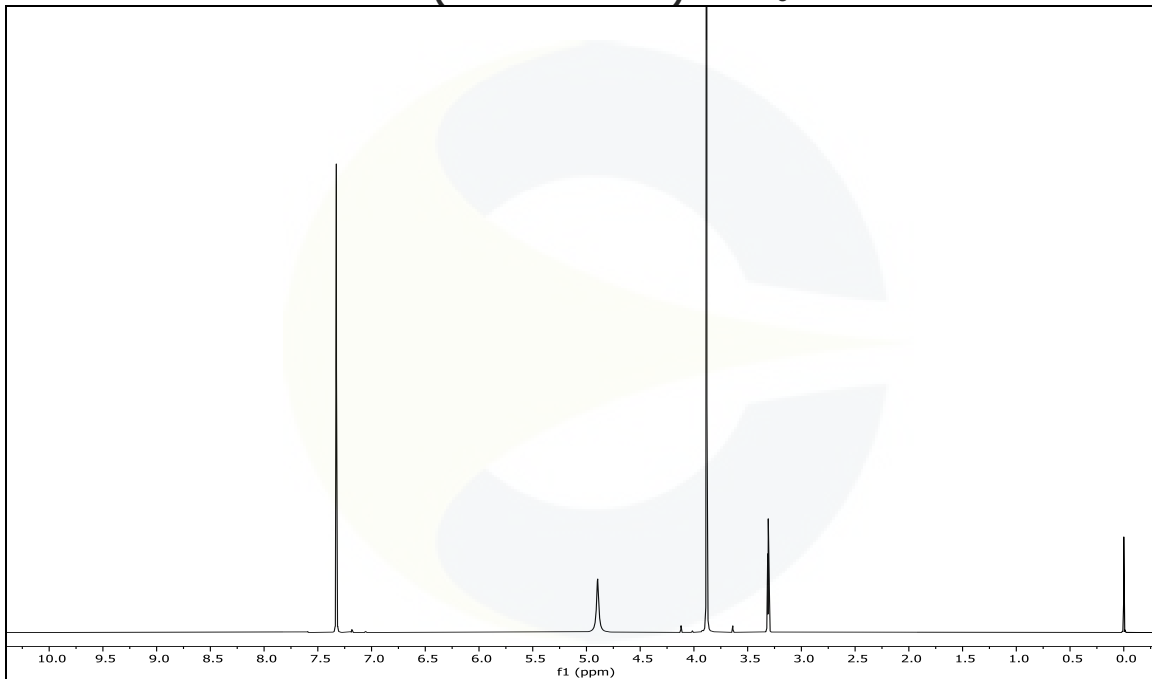
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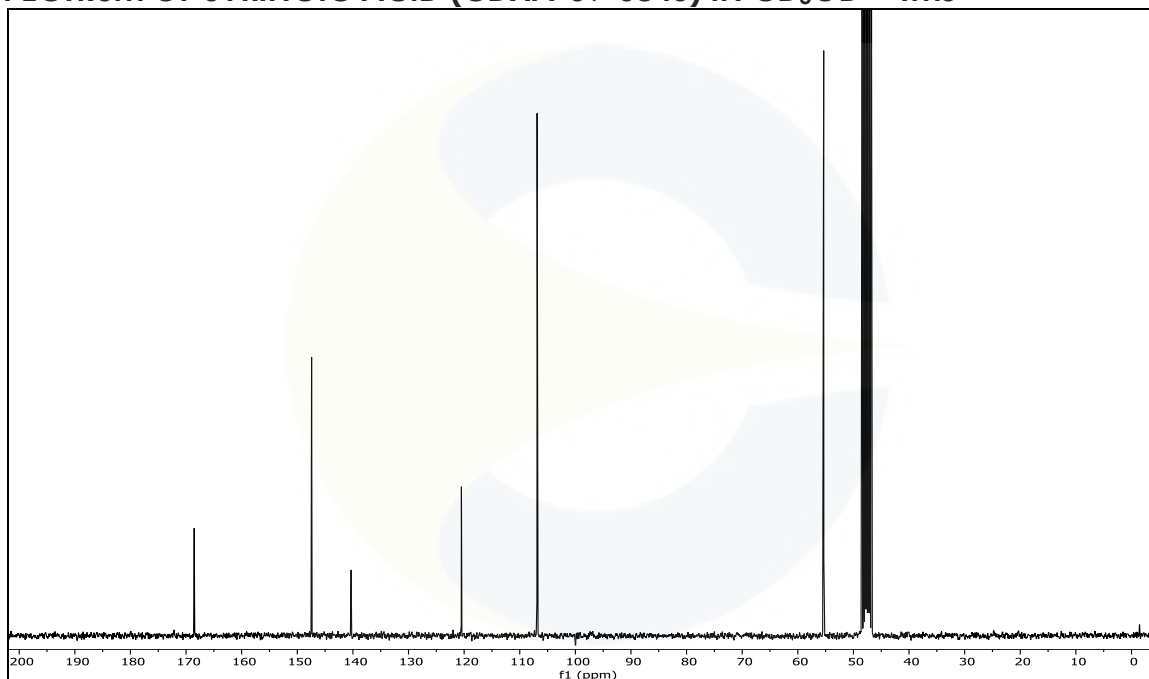
**MASS SPECTRUM OF SYRINGIC ACID (CDXA-09-0840)**

**<sup>1</sup>H-NMR SPECTRUM OF SYRINGIC ACID (CDXA-09-0840) in CD<sub>3</sub>OD + TMS**


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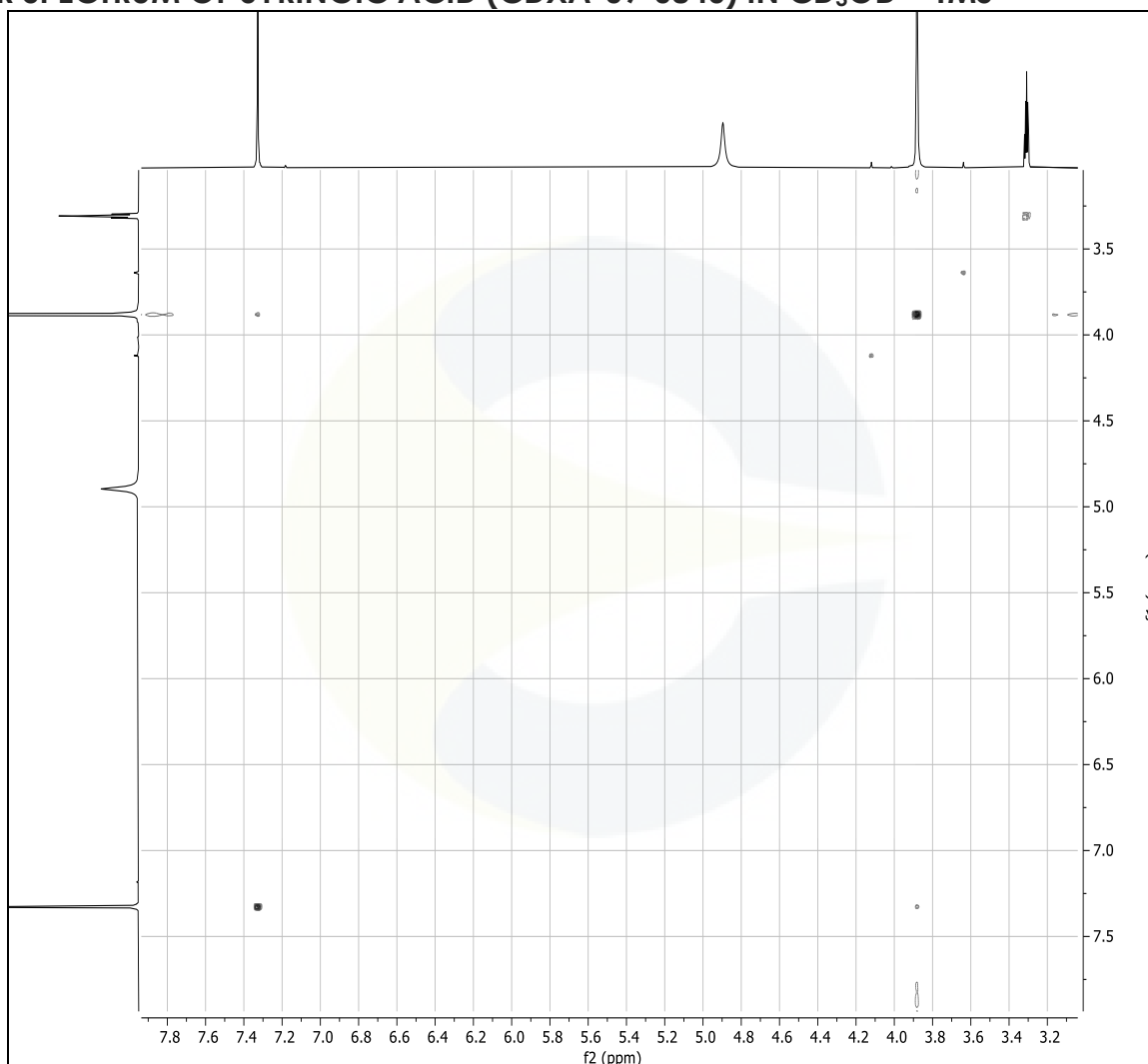
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**<sup>13</sup>C-NMR SPECTRUM OF SYRINGIC ACID (CDXA-09-0840) IN CD<sub>3</sub>OD + TMS**

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**COSY-NMR SPECTRUM OF SYRINGIC ACID (CDXA-09-0840) IN CD<sub>3</sub>OD + TMS**

**REVISION HISTORY**

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	03/10/2009	New report
01	10/15/2013	Material passed re-evaluation. Updated expiration date
02	03/25/2021	Passed re-evaluation by HPLC, KF, and NMR. Updated expiration date, analytical results, analytical conditions, and chromatograms. Added NMR spectra and removed melting point.

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