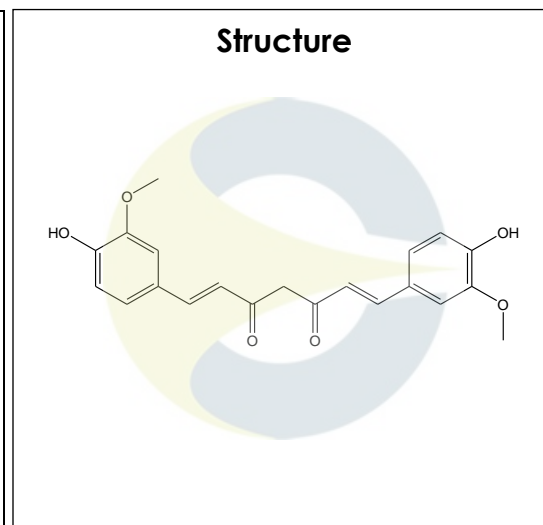


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<b>PRODUCT NAME</b>	Curcumin
<b>PART NUMBER</b>	00003926
<b>STANDARD TYPE</b>	Primary (P) – Compendial Traceable
<b>LOT NUMBER</b>	00003926-515
<b>REPORT NUMBER</b>	CDXA-RSS-3467-04
<b>SAMPLE NUMBER</b>	CDXA-09-1789
<b>DATE OF SAMPLE</b>	04/24/2009
<b>DATE OF RE-EVALUATION</b>	05/02/2013 (1 <sup>st</sup> ); 07/14/2017 (2 <sup>nd</sup> ); 05/27/2021 (3 <sup>rd</sup> )
<b>DATE OF REPORT</b>	07/19/2021



<b>CHEMICAL NAMES</b>	(E,E)-1,7-Bis(4-hydroxy-3-methoxyphenyl)-1,6-heptadiene-3,5-dione; Diferuloylmethane; Haldar; Halud; Indian saffron; Souchet; Terra merita; Yellow root; Yo-kin
<b>CHEMICAL FORMULA</b>	C <sub>21</sub> H <sub>20</sub> O <sub>6</sub>
<b>MOLECULAR WEIGHT (MW)</b>	368.38
<b>CHEMICAL FAMILY</b>	Phenolics
<b>CAS NUMBER</b>	[458-37-7]
<b>EC#(EINECS)</b>	207-280-5
<b>RTECS</b>	MI5230000

**ANALYTICAL RESULTS**

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	99.9%
HPLC	CDXA-CPM-021-00	≥ 90%	99.9%
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	Orange powder

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

ADJUSTED PURITY: 99.9% IS BASED ON (100 - 0.0 WATER - 0.0 SOLVENTS) X 99.9% HPLC

TRACEABLE SOURCE	LOT NUMBER	ASSAY RESULT
USP	R137EO	99.9%

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**STORAGE CONDITIONS**

**STORAGE** Room Temperature in a dry place.  
**EXPIRATION DATE** 05/2026 under the above conditions.

**ANALYTICAL CONDITIONS**

**INSTRUMENT** AGILENT 1260 HPLC UV-VIS (DAD);  
 FINNIGAN LCQ-DECA

**COLUMN** Phenomenex Luna C18(2) 150 x 4.6 mm, 3 µm particle size

**MOBILE PHASE** A – 0.1% Phosphoric acid in Milli-Q Water, B – Acetonitrile;  
 30% B increasing to 65% B over 20 minutes. Holding at 65% B for 5 minutes, then decreasing back to starting conditions over a minute.

**COLUMN TEMP.** 35 °C

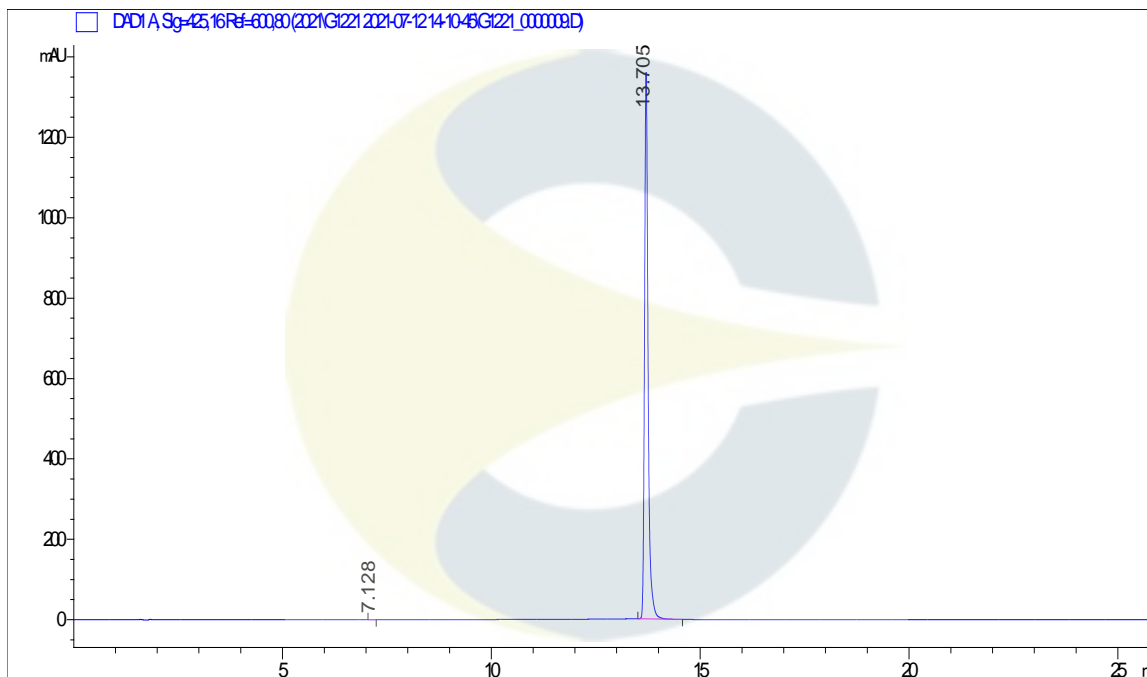
**FLOW RATE** 1.0 mL/minute

**INJECTION VOL.** 1.0 µL

**INJECTION CONC.** 1.0 mg/mL in Methanol

**DETECTION** 425 ± 8 nm

**HPLC CHROMATOGRAM OF CURCUMIN (CDXA-09-1789)**

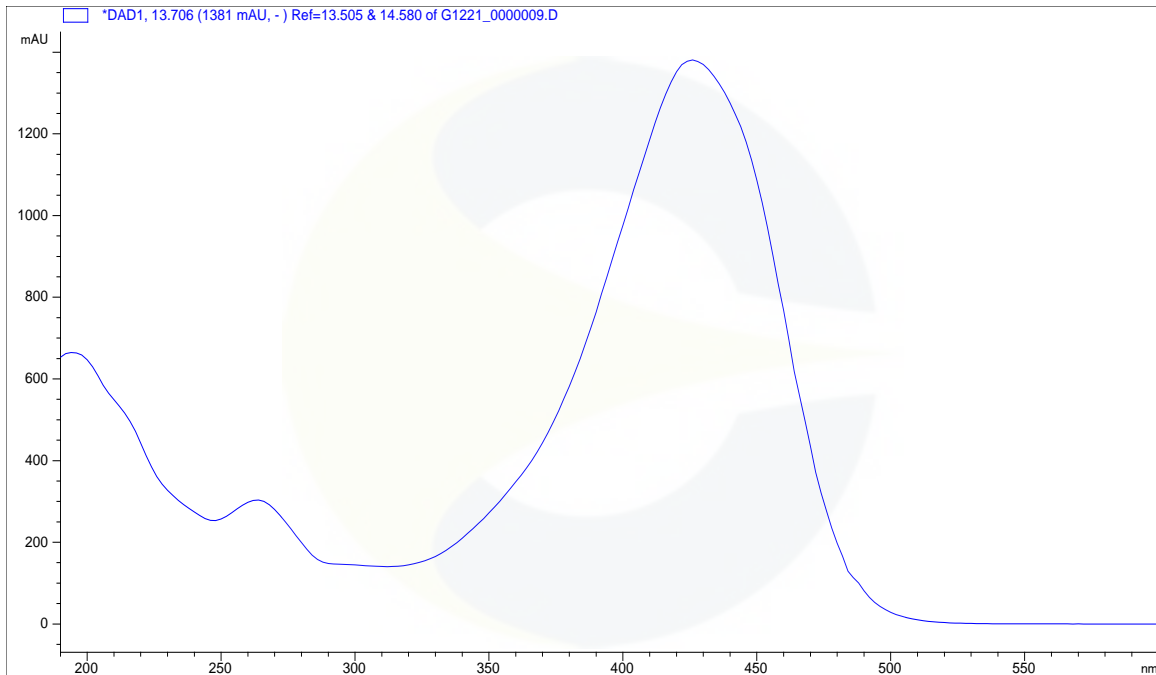


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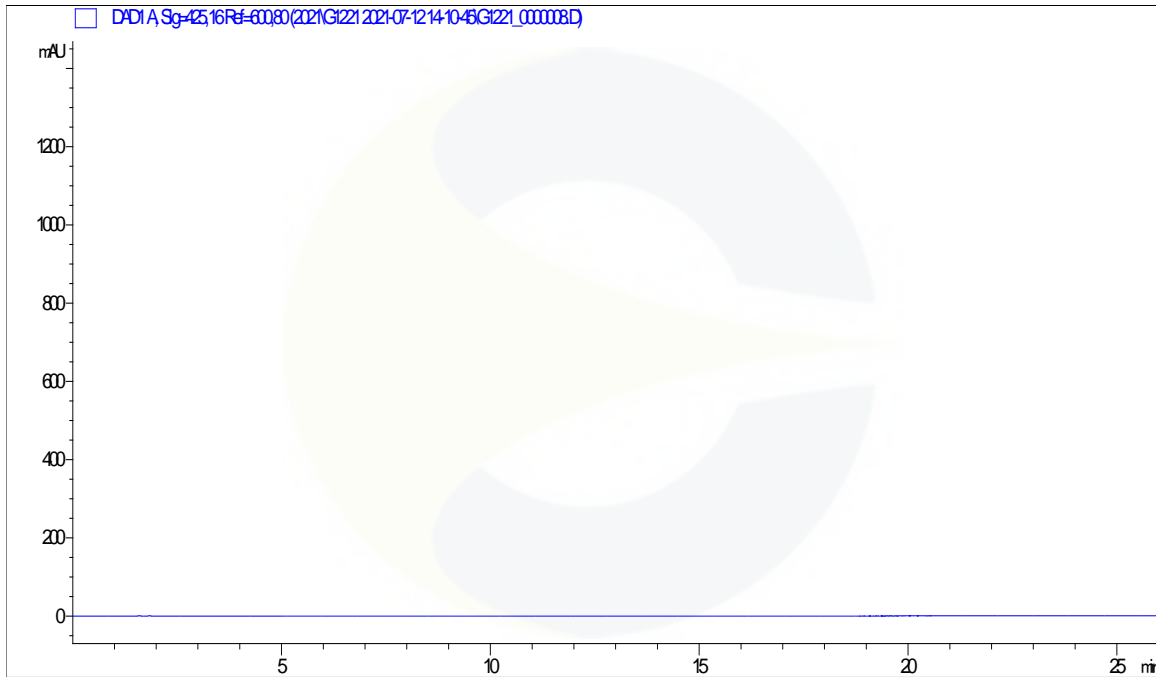
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## UV SPECTRUM AT RT = 13.7 MINUTES



## HPLC CHROMATOGRAM OF BLANK

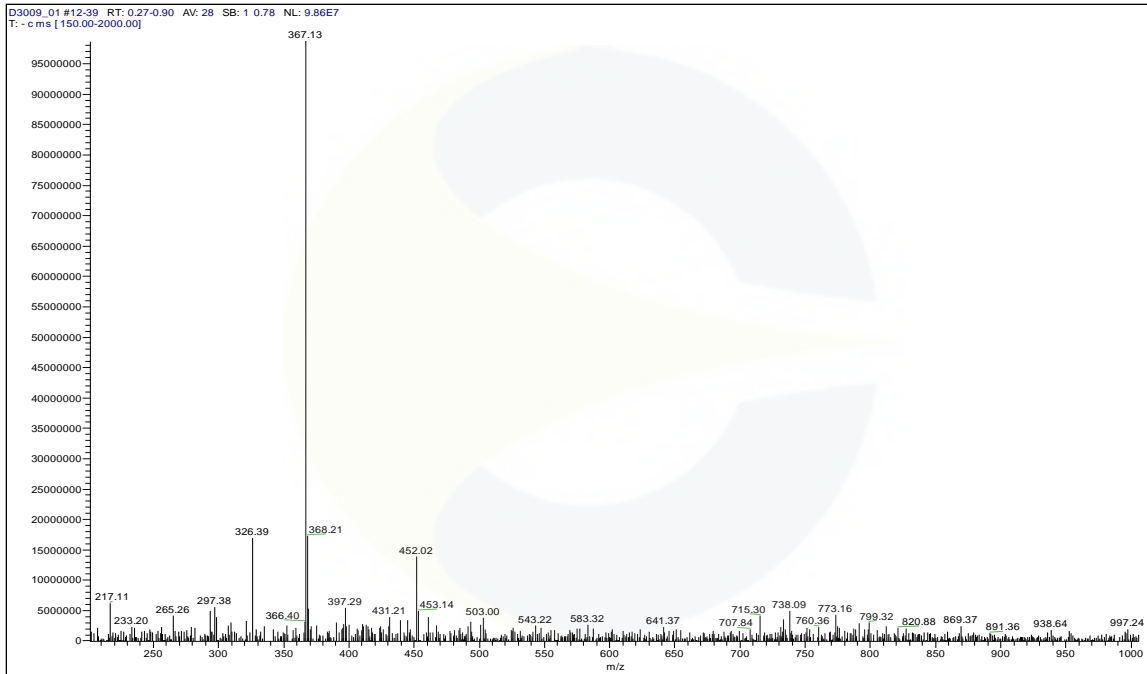


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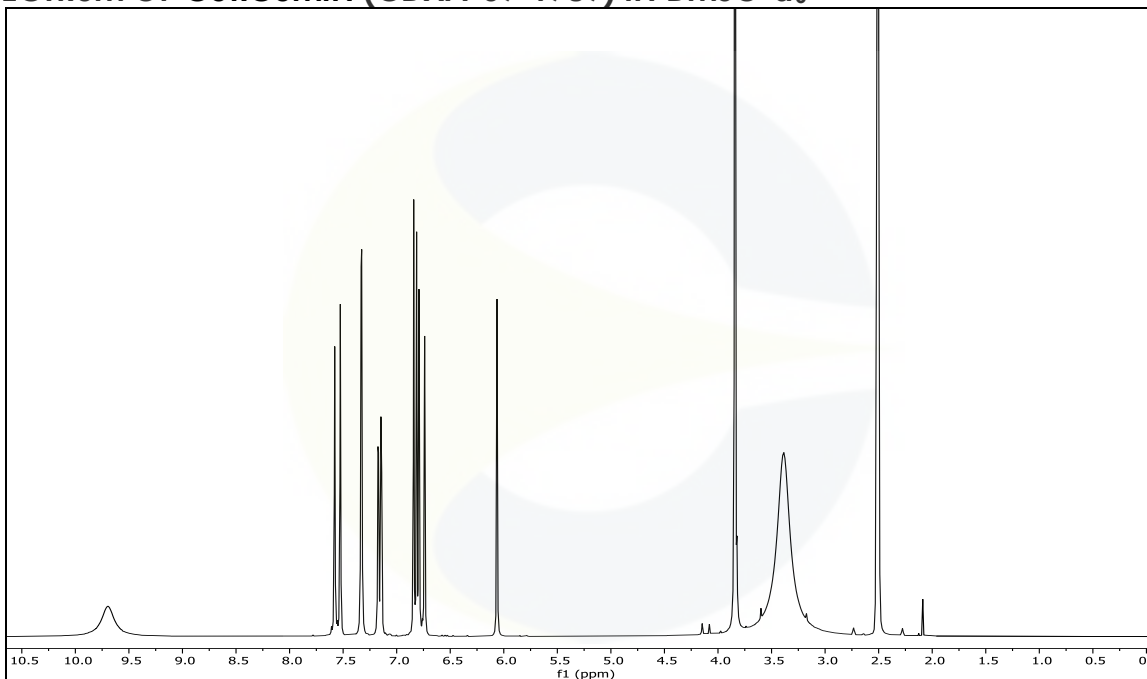
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**MASS SPECTRUM OF CURCUMIN (CDXA-09-1789)**



**<sup>1</sup>H-NMR SPECTRUM OF CURCUMIN (CDXA-09-1789) IN DMSO-d<sub>6</sub>**

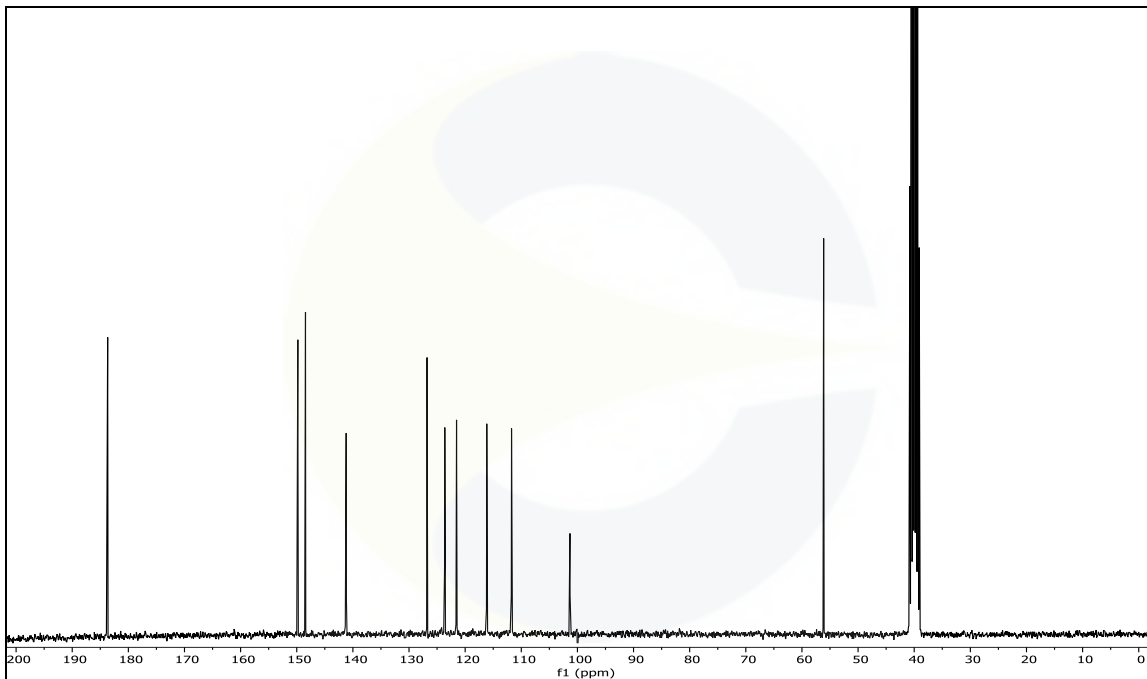


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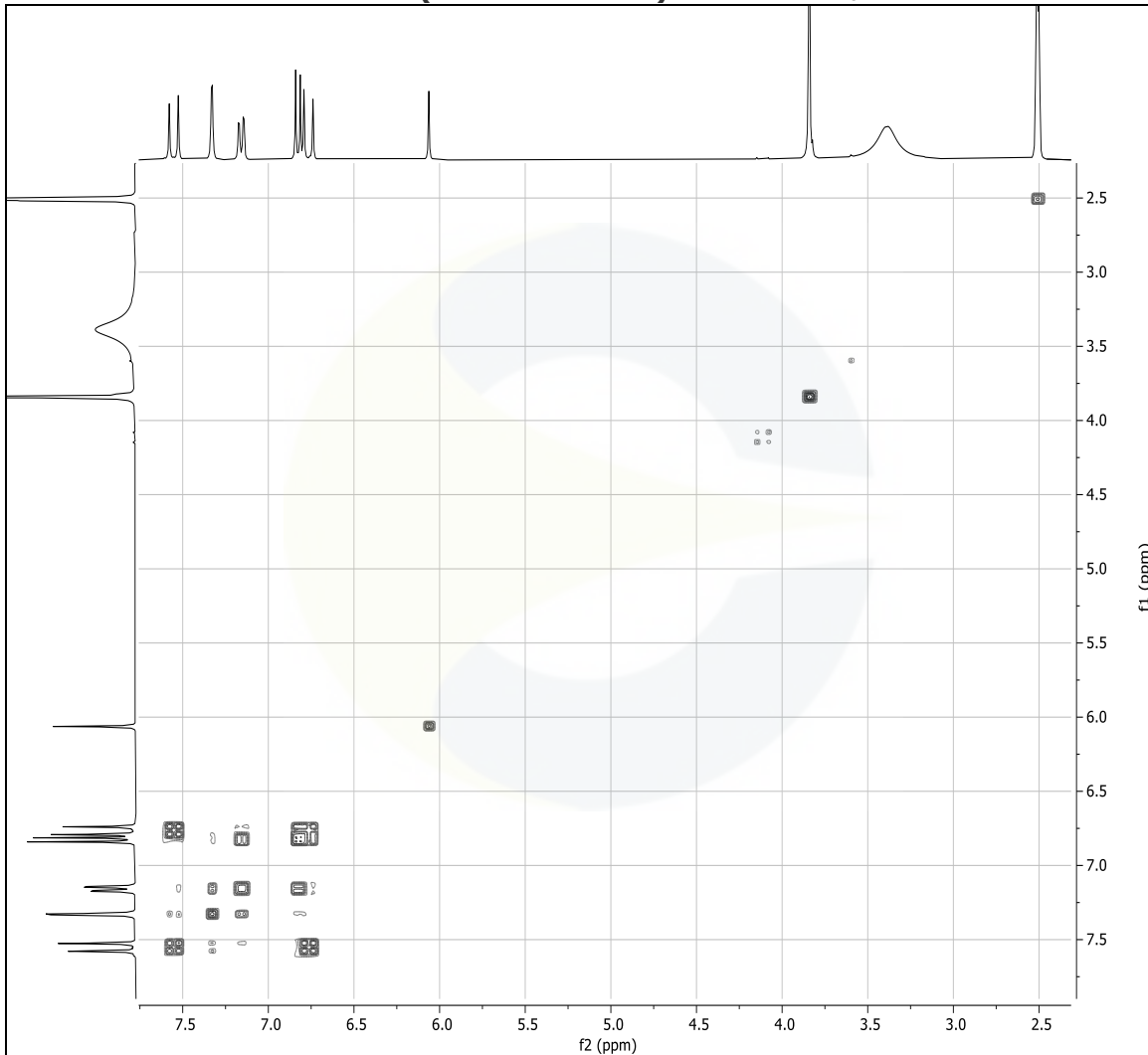
<sup>13</sup>C-NMR SPECTRUM OF CURCUMIN (CDXA-09-1789) IN DMSO-d<sub>6</sub>



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**COSY-NMR SPECTRUM OF CURCUMIN (CDXA-09-1789) IN DMSO-d<sub>6</sub>**

**REVISION HISTORY**

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	05/14/2009	New report
01	05/02/2013	Upgraded PN from P-grade to CT.
02	09/03/2013	Updated expiration date.
03	07/14/2017	Passed second re-evaluation by HPLC, KF. Updated expiration date, analytical method, conditions, chromatograms and results. Removed melting point.
04	07/19/2021	Passed third re-evaluation by HPLC, KF and NMR. Updated expiration date, analytical method, conditions, chromatograms and results.

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