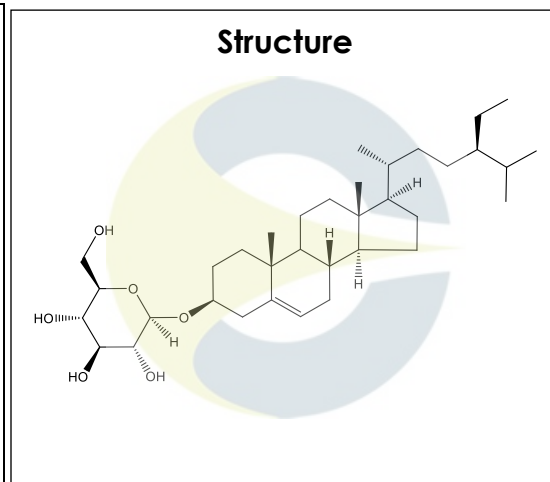


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PRODUCT NAME	beta-Sitosterol-3-O-glucoside
PART NUMBER	00019291
STANDARD TYPE	Primary (P) – AHP Verified*
LOT NUMBER	00019291-0001
REPORT NUMBER	CDXA-RSS-4815-03
SAMPLE NUMBER	CDXA-12-0001
DATE OF SAMPLE	01/02/2012
DATE OF RE-EVALUATION	07/21/2016 (1 st); 07/08/2020 (2 nd)
DATE OF REPORT	08/17/2020



CHEMICAL NAMES	(3β)-Stigmast-5-en-3-yl β-D-glucopyranoside; Daucosterol
CHEMICAL FORMULA	C ₃₅ H ₆₀ O ₆
MOLECULAR WEIGHT (MW)	576.85
CHEMICAL FAMILY	Phytosterols
CAS NUMBER	[474-58-8]
EC#(EINECS)	N/A
RTECS	WJ2508000

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	NA	97.1%
HPLC	0.700.10.2.METH22	NA	99.9%
NMR	99.1-CD-1.0-000122	Conforms to structure	Conforms to structure
Mass Spectrum	Direct Infusion, ESI (-)	Conforms	Conforms
Residual Solvent	99.1-CD-5.0-000115	NA	Methanol – 0.4%
Water	0.700.12.37	NA	2.4%
Appearance	NA	NA	White to off-white powder

ADJUSTED PURITY: 97.1% IS BASED ON (100 - 2.4 WATER - 0.4 SOLVENTS) X 99.9% HPLC

STORAGE CONDITIONS

STORAGE	+4 °C in a dry place.
EXPIRATION DATE	07/2025 under the above conditions.

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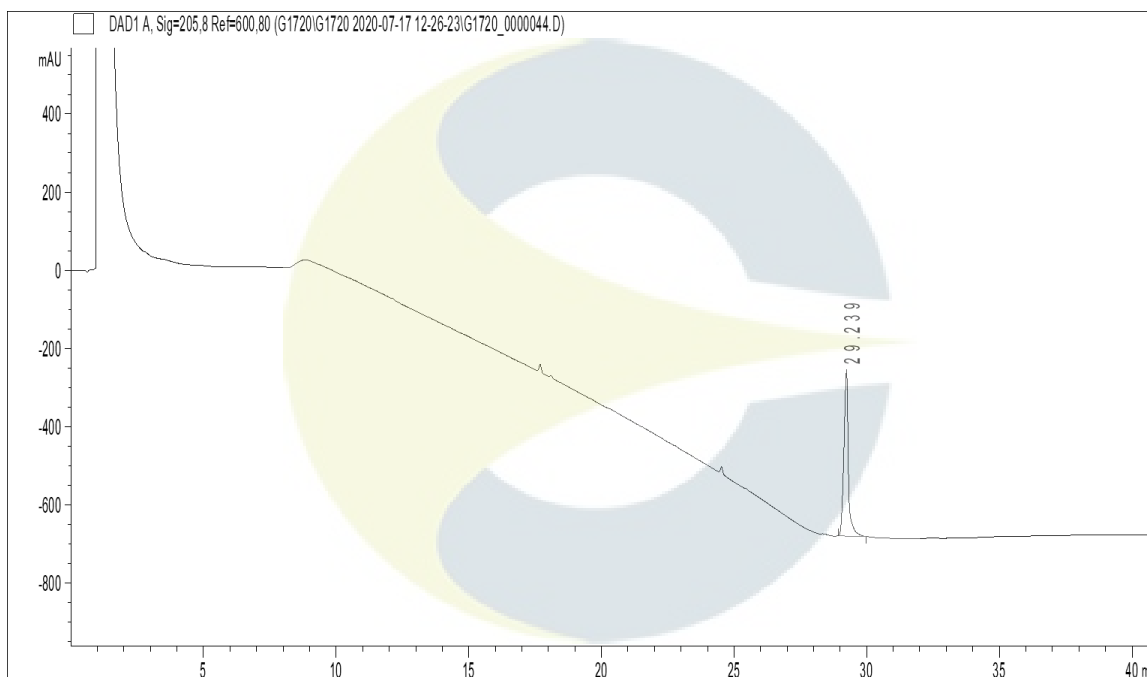
*AMERICAN HERBAL PHARMACOPOEIA™ BOTANICAL AND CHEMICAL REFERENCE STANDARD VERIFICATION PROGRAM AVAILABLE THROUGH CHROMADEx

American Herbal Pharmacopoeia™ botanical reference standards are now available. Each American Herbal Pharmacopoeia Verified™ chemical reference is subjected to independent verification for identity and level of purity by American Herbal Pharmacopoeia Verified™ collaborating laboratories. The corresponding data package is similarly archived at the American Herbal Pharmacopoeia Verified™. Corresponding certificates of analyses are available through the authorized licensees of American Herbal Pharmacopoeia Verified™ standards.

ANALYTICAL CONDITIONS

INSTRUMENT	AGILENT 1260 HPLC UV-VIS (DAD); AGILENT 6510 QTOF
COLUMN	Phenomenex Luna C18(2) 150 x 2.00 mm, 5 µm particle size
MOBILE PHASE	A - 0.1% Trifluoroacetic acid in Milli-Q water, B - Acetonitrile; Isocratic 5% B for 5 minutes, then increasing to 95% B over 20 minutes. Hold at 95% B for 15 minutes.
COLUMN TEMP.	60 °C
FLOW RATE	0.4 mL/minute
INJECTION VOL.	5.0 µL
INJECTION CONC.	1.1 mg/mL in Dimethyl sulfoxide : Methanol (1:1)
DETECTION	205 ± 4 nm

HPLC CHROMATOGRAM OF BETA-SITOSTEROL-3-O-GLUCOSIDE (CDXA-12-0001)

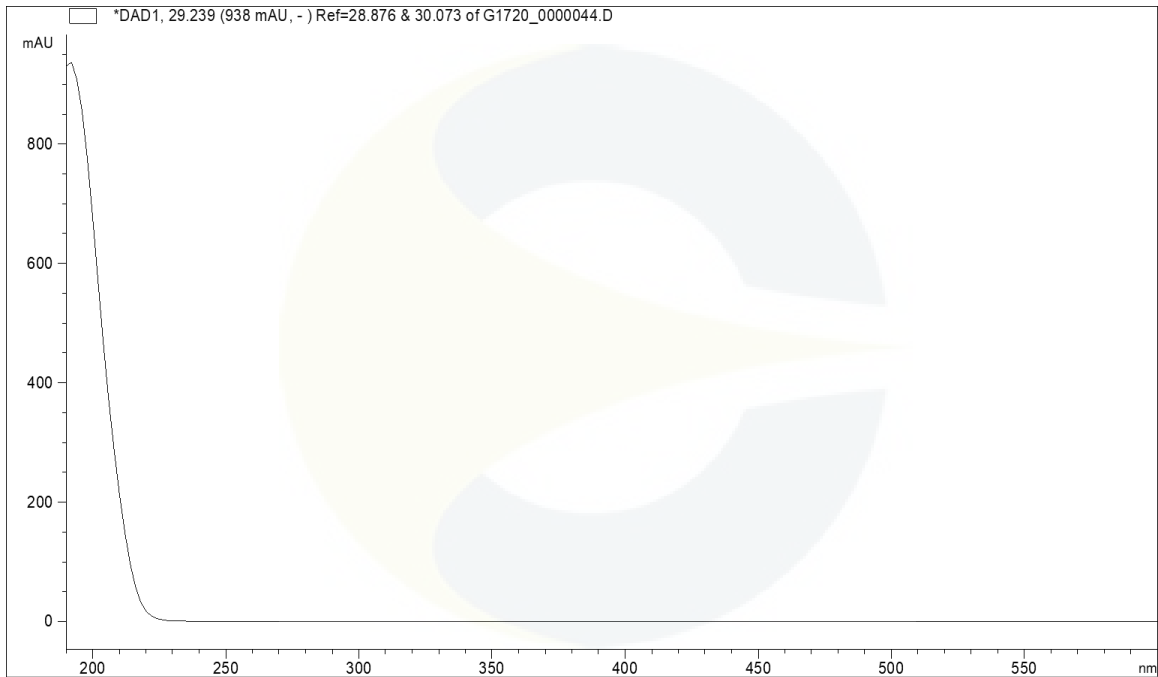


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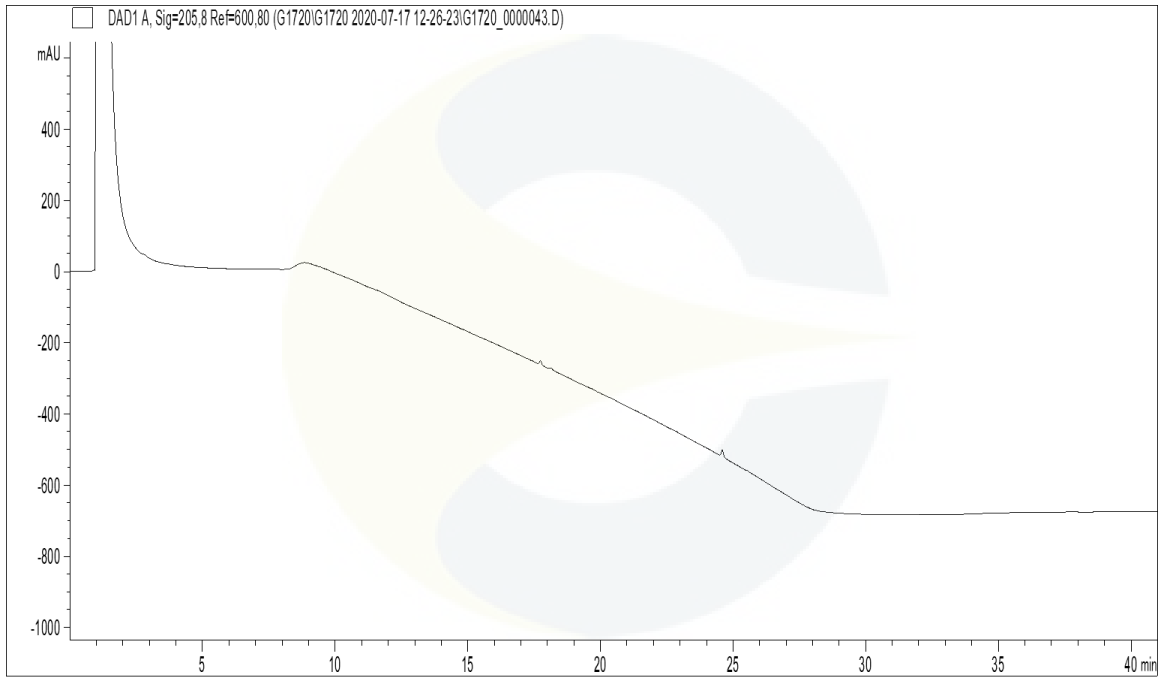
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UV SPECTRUM AT RT = 29.2 MINUTES



HPLC CHROMATOGRAM OF DILUENT BLANK

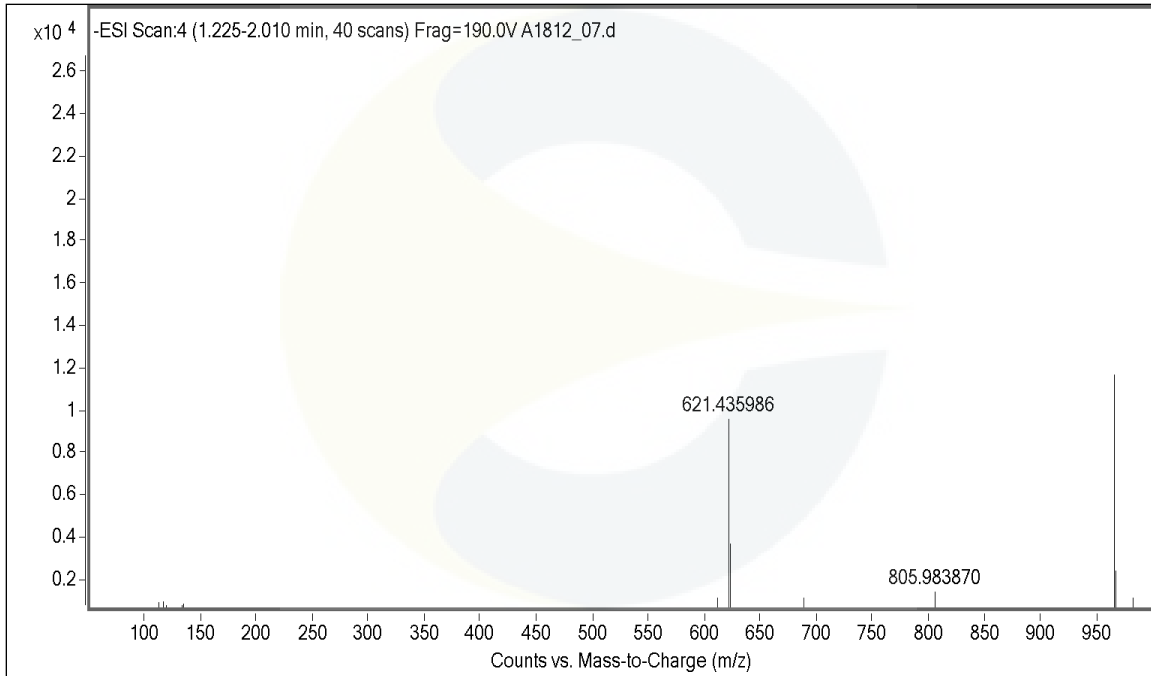


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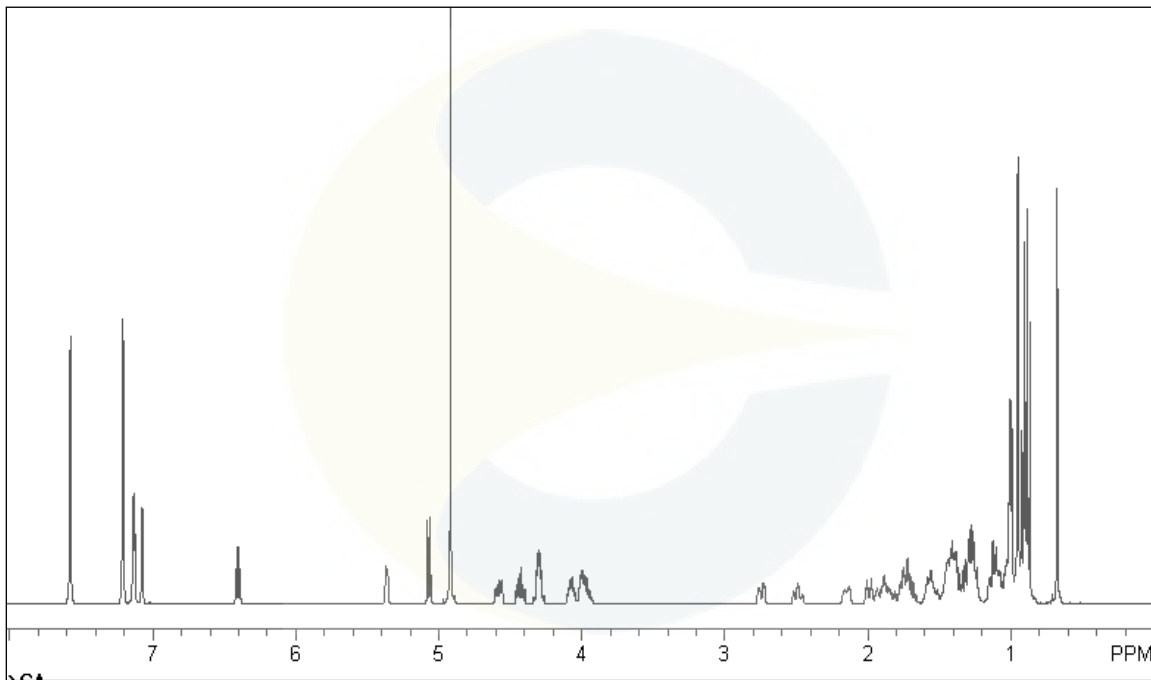
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MASS SPECTRUM OF BETA-SITOSTEROL-3-O-GLUCOSIDE (CDXA-12-0001)



¹H-NMR SPECTRUM OF BETA-SITOSTEROL-3-O-GLUCOSIDE (CDXA-12-0001) IN PYRIDINE-d₅

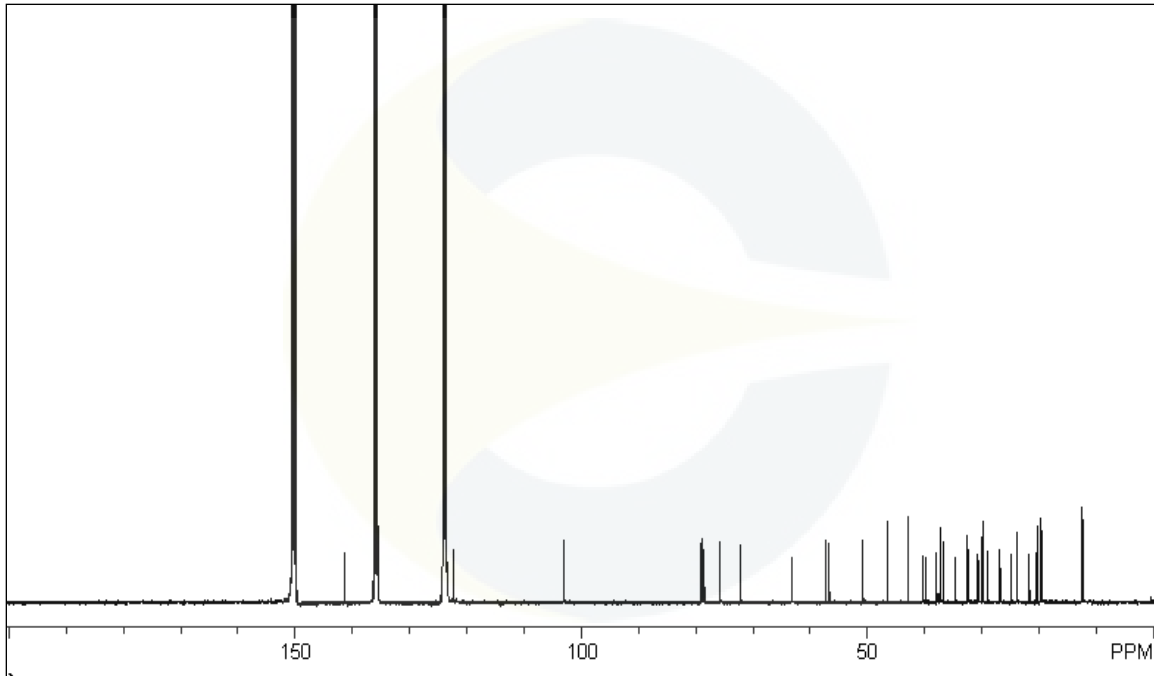


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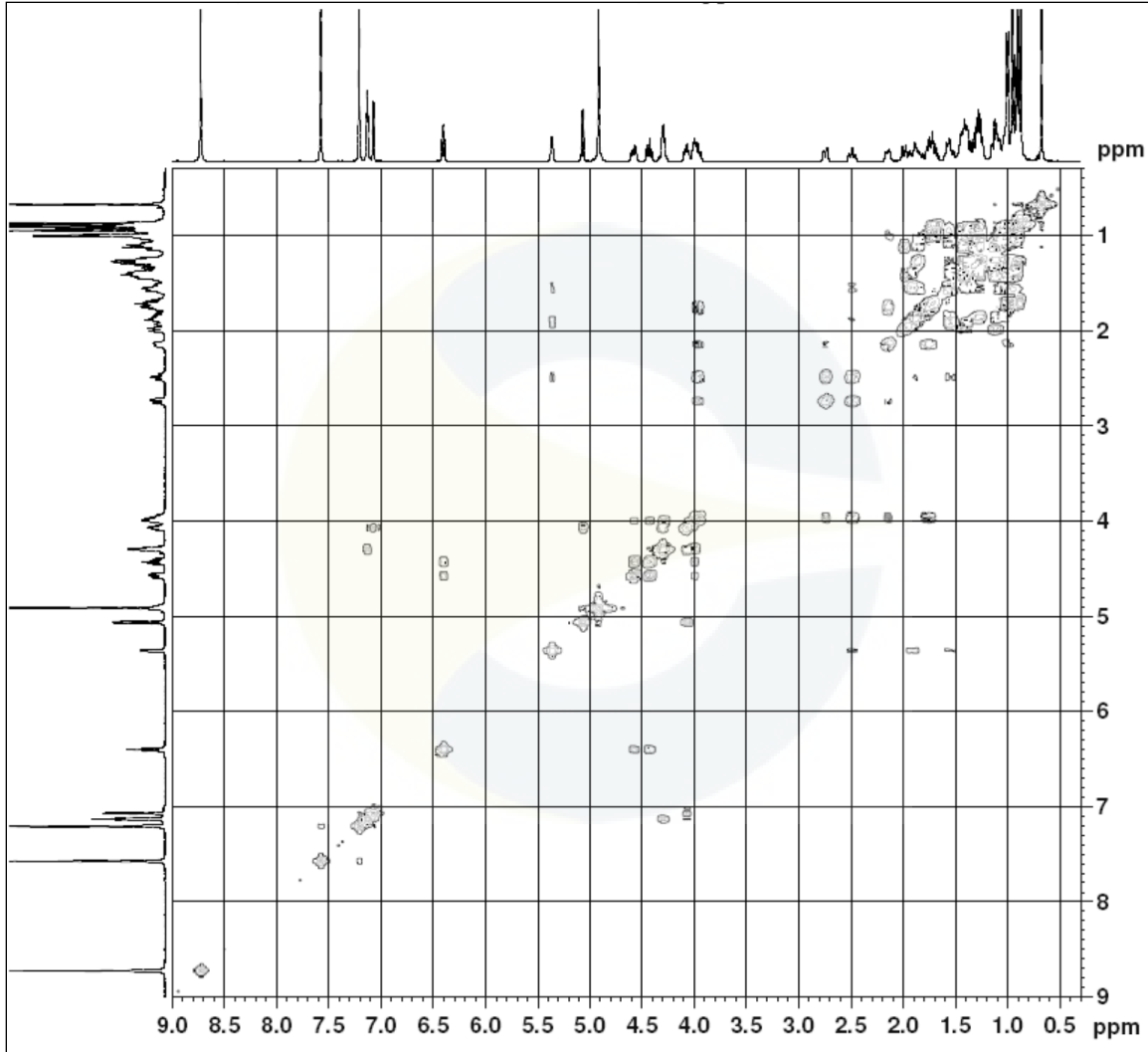
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¹³C-NMR SPECTRUM OF BETA-SITOSTEROL-3-O-GLUCOSIDE (CDXA-12-0001) IN PYRIDINE-d₅



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COSY-NMR SPECTRUM OF BETA-SITOSTEROL-3-O-GLUCOSIDE (CDXA-12-0001) IN PYRIDINE-d₅

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	01/18/2012	New report
01	08/19/2014	Updated product grade to AHP
02	08/30/2016	Passed re-evaluation by HPLC, KF. Updated expiration date, chemical structure, and RTECS number.
03	08/17/2020	Passed second re-evaluation by HPLC, KF. Updated expiration date, chromatograms, structure, analytical results, conditions. Removed melting point.

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