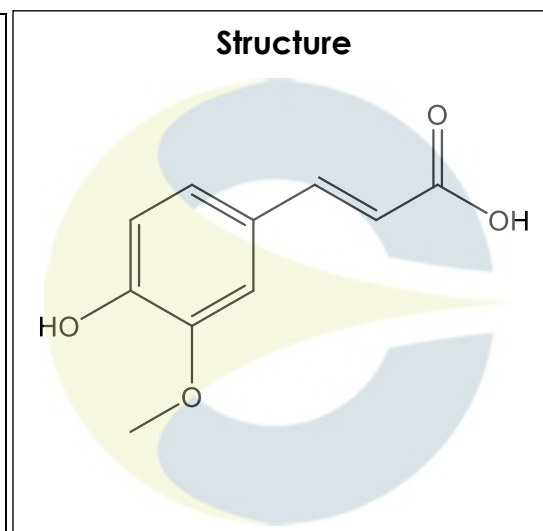


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PRODUCT NAME	trans-Ferulic acid
PART NUMBER	00006005
STANDARD TYPE	Primary (P)
LOT NUMBER	00006005-001
REPORT NUMBER	CDXA-RSS-3987-04
SAMPLE NUMBER	CDXA-10-2878
DATE OF SAMPLE	05/10/2010
DATE OF RE-EVALUATION	09/24/2014 (1 st); 09/25/2018 (2 nd); 08/09/2022 (3 rd)
DATE OF REPORT	09/21/2022



CHEMICAL NAMES	(2E)-3-(4-Hydroxy-3-methoxyphenyl)-2-propenoic acid; (E)-Ferulic acid; trans-4-Hydroxy-3-methoxycinnamic acid
CHEMICAL FORMULA	C ₁₀ H ₁₀ O ₄
MOLECULAR WEIGHT (MW)	194.18
CHEMICAL FAMILY	Phenolic acids
CAS NUMBER	[537-98-4]
EC#(EINECS)	208-679-7
RTECS	GD9275000

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	99.9%
HPLC	0.700.10.2.METH22	≥ 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	White powder

*Testing performed at an ISO 17025 accredited subcontracted laboratory.

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

STORAGE CONDITIONS

STORAGE	+4 °C in a dry place.
EXPIRATION DATE	08/2027 under the above conditions.

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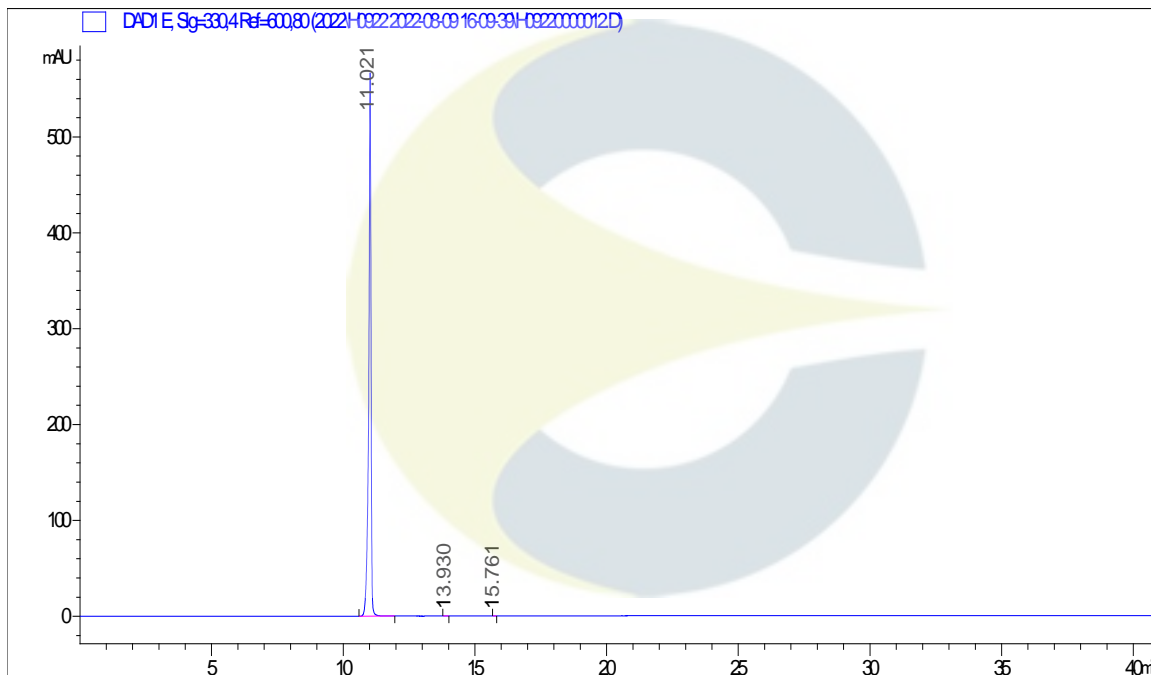
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ANALYTICAL CONDITIONS

INSTRUMENT	AGILENT 1260 HPLC UV-VIS (DAD); AGILENT 1100 ION TRAP
COLUMN	Phenomenex Luna C18(2) 150 x 2.00 mm, 5 µm particle size
MOBILE PHASE	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.
COLUMN TEMP.	60 °C
FLOW RATE	0.4 mL/minute
INJECTION VOL.	0.2 µL
INJECTION CONC.	1.2 mg/mL in Methanol
DETECTION	330 ± 2 nm

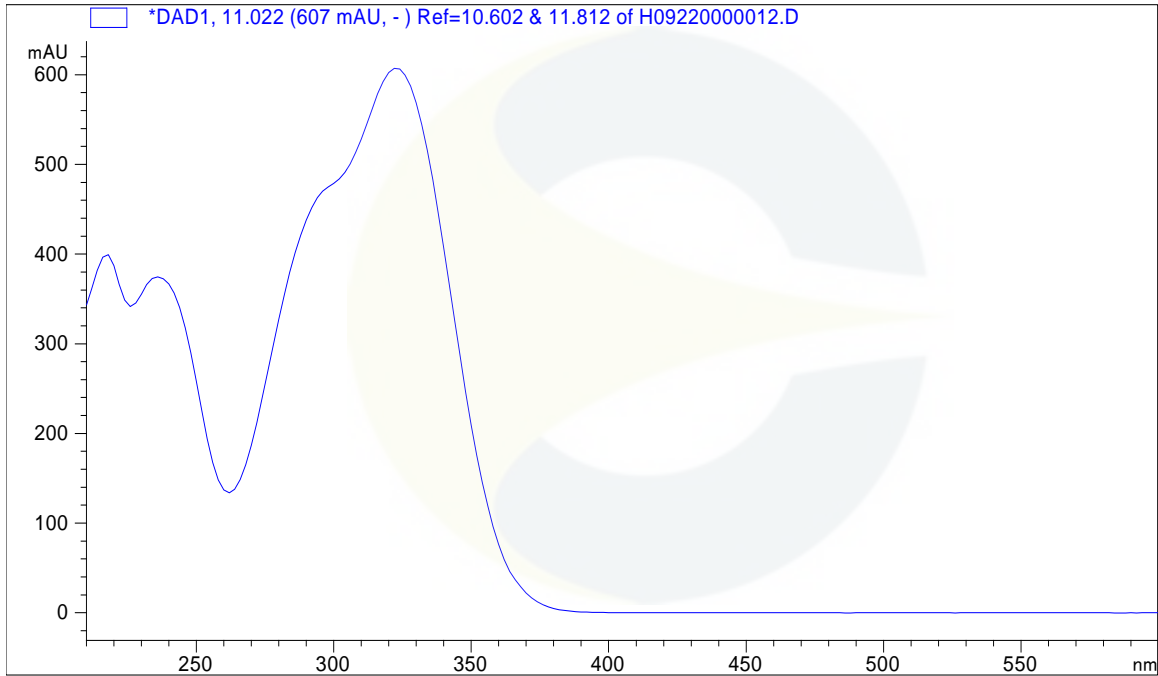
HPLC CHROMATOGRAM OF TRANS-FERULIC ACID (CDXA-10-2878)



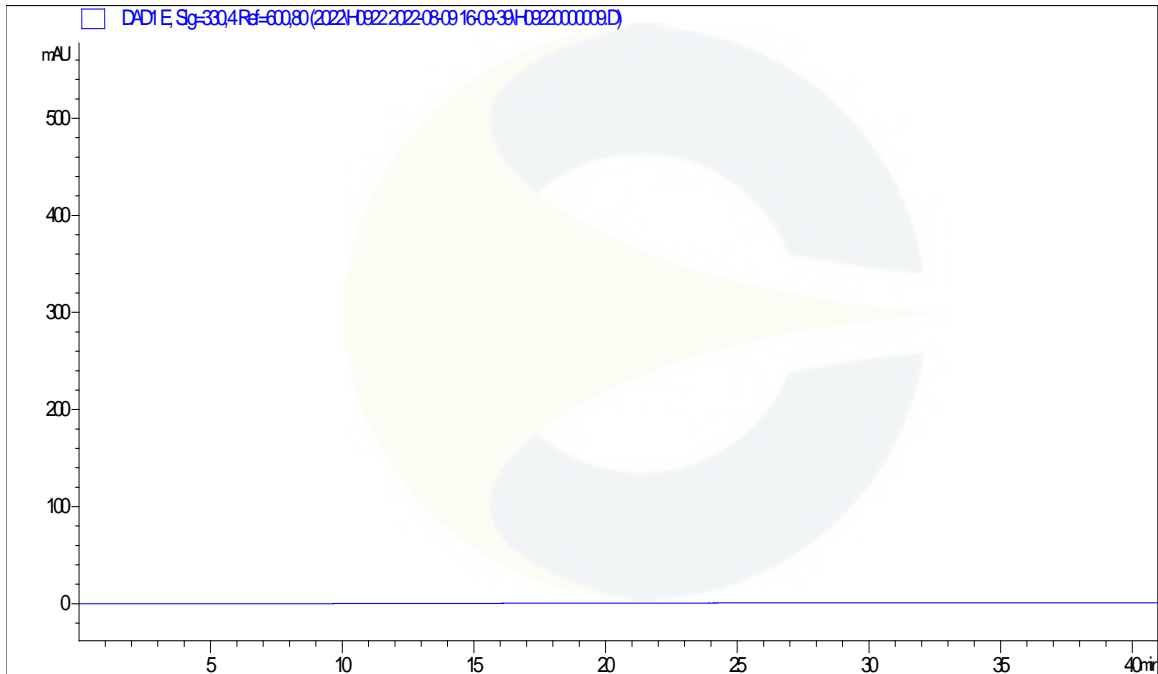
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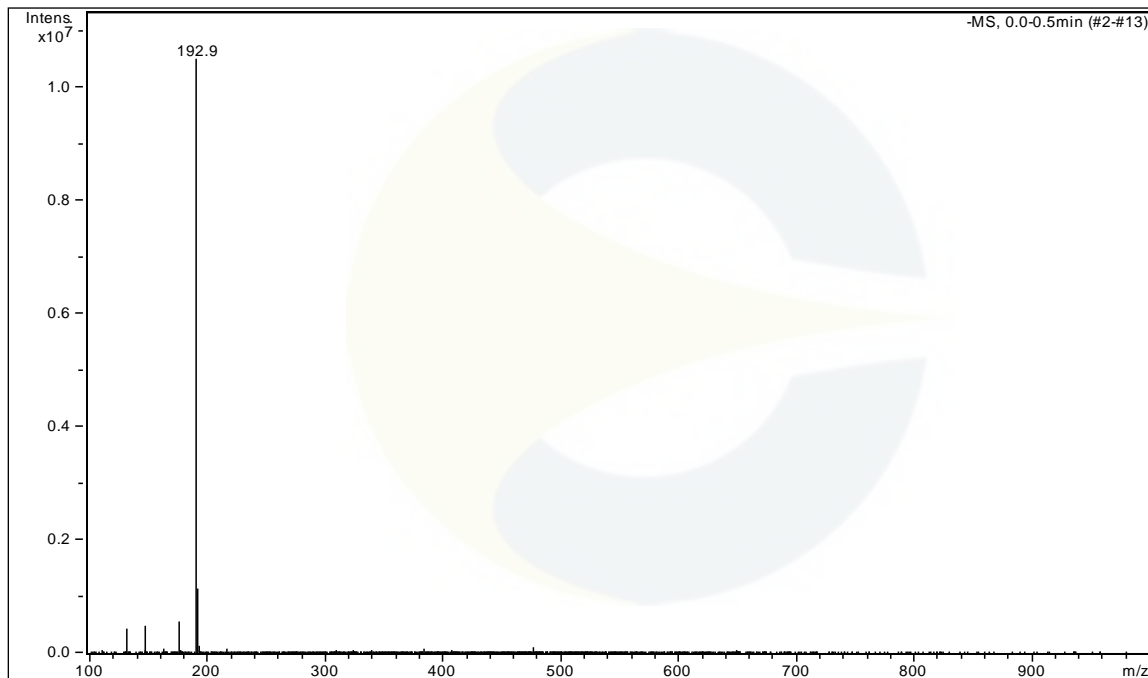
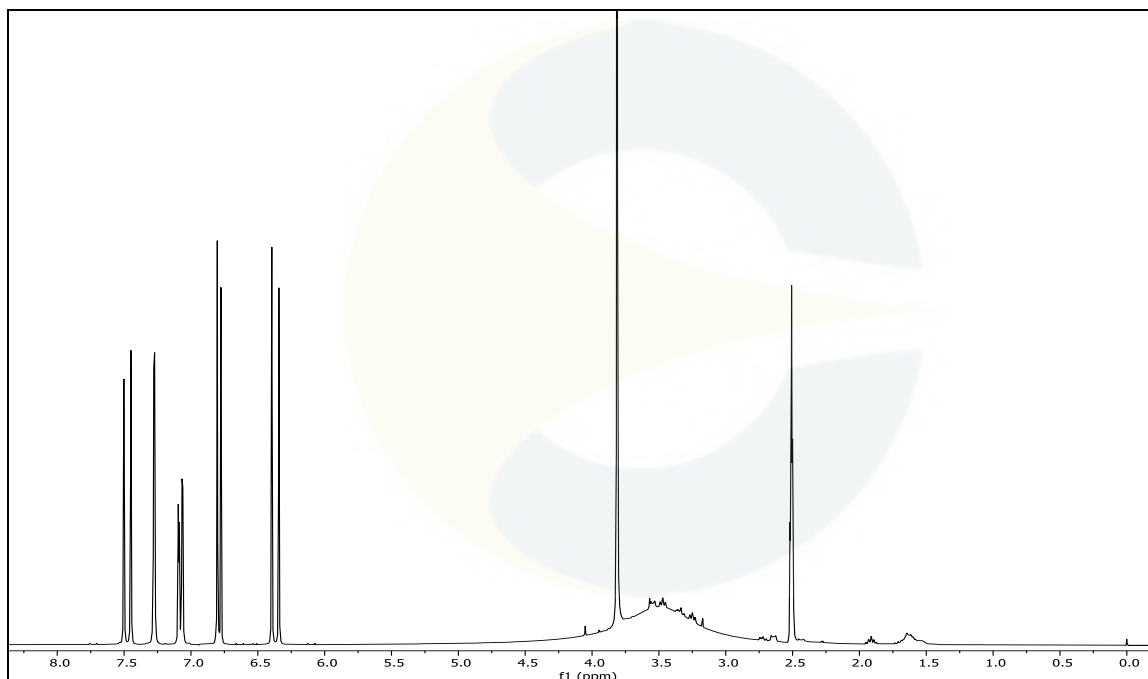
UV SPECTRUM AT RT = 11.0 MINUTES



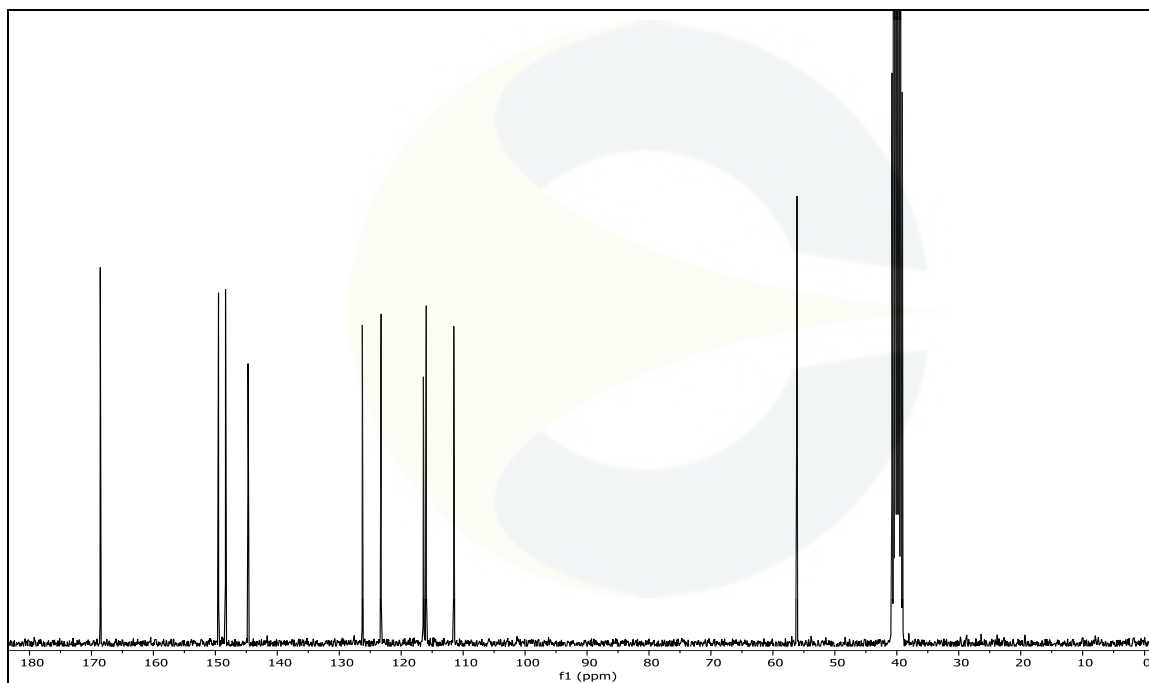
HPLC CHROMATOGRAM OF DILUENT BLANK



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MASS SPECTRUM OF TRANS-FERULIC ACID (CDXA-10-2878)

¹H-NMR SPECTRUM OF TRANS-FERULIC ACID (CDXA-10-2878) IN DMSO-d₆ + TMS


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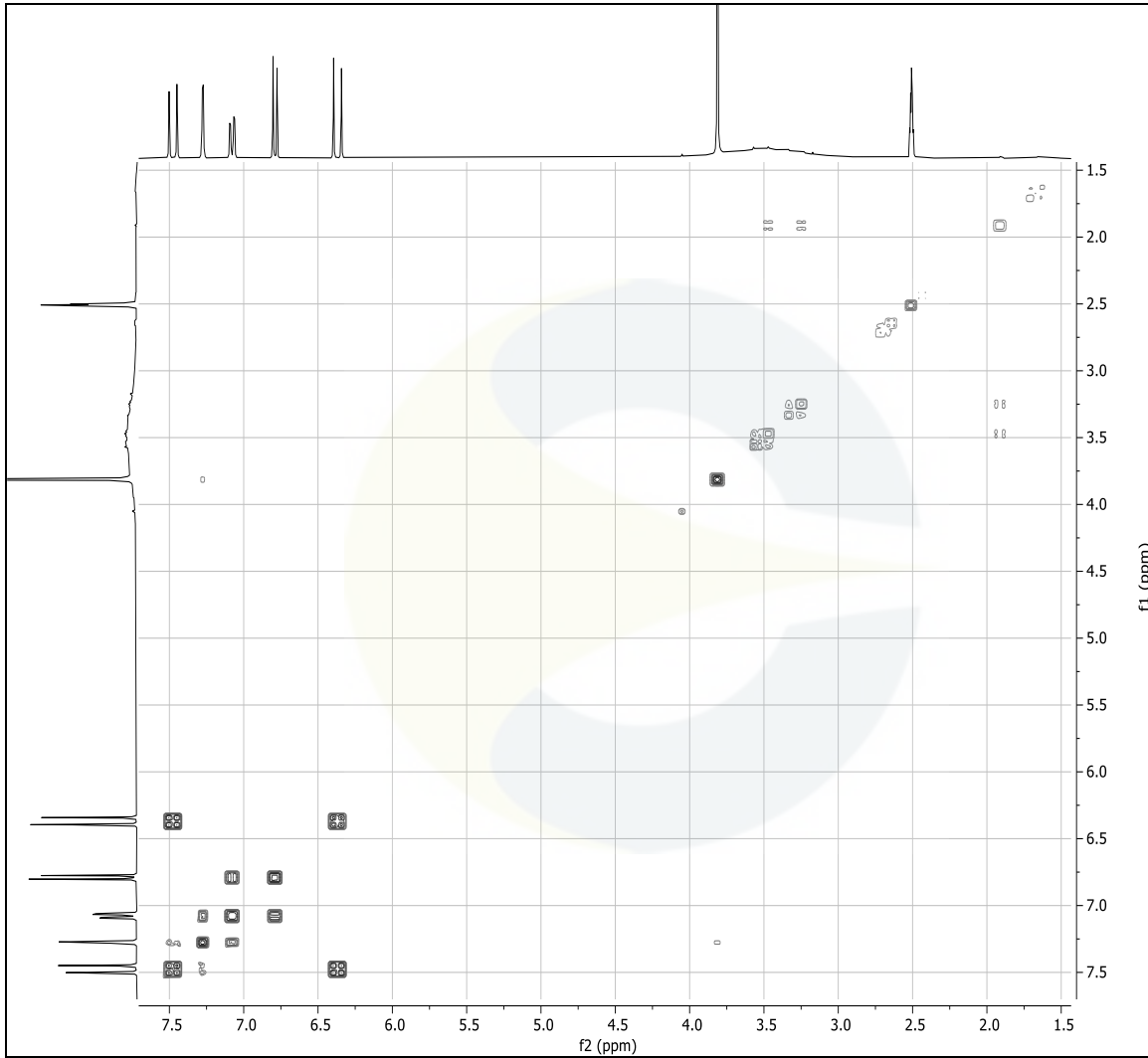
¹³C-NMR SPECTRUM OF TRANS-FERULIC ACID (CDXA-10-2878) IN DMSO-d₆ + TMS

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Email: customerservice@lifetechindia.com Website: www.lifetechindia.com

COSY-NMR SPECTRUM OF TRANS-FERULIC ACID (CDXA-10-2878) IN DMSO-*d*₆ + TMS



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REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	05/20/2010	New report
01	07/16/2010	Revision to change name from Ferulic acid [1135-24-6] to trans-Ferulic acid [537-98-4]
02	11/04/2014	Passed re-evaluation by HPLC. Updated expiration date.
03	10/16/2018	Passed reevaluation by HPLC and KF. Updated analytical results, analytical conditions, HPLC chromatograms, and expiration date. Removed melting point.
04	09/21/2022	Pass third re-evaluation by HPLC, KF and NMR. Updated expiration date, analytical condition, chromatograms and results.

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