Certificate of Analysis

ISO 17034 Reference Material

Product Identification

Article Code: DRE-C10010500
Article Name: Acequinocyl
Formula: C24H32O4
Mol. Weight: 384.51
CAS No.: 57960-19-7

Lot Number: G989398
Expiry Date: 21.11.2023
Storage Temperature: 20°C ± 4°C

Storage and handling: The RM should be stored in the original sealed bottle at the temperature given above. After use the bottle should be tightly closed and protected from moisture.

Purity:	98.18% (g/g)
Expanded Uncertainty U=	0.30% (g/g)

The uncertainty of this standard is calculated in accordance with the ISO 17034 and EURACHEM/CITAC Guide - Quantifying Uncertainty in Analytical Measurement, Second Edition. The expanded uncertainty is U(exp) = u(RM) x k, where k is the coverage factor at the 95% confidence level (k=2). Uncertainty u(RM) is based on the combination of the uncertainties associated with each individual operation involved in the analysis of the product: $u(RM) = \sqrt{u(char)^2 + u(bb)^2 + u(lts)^2 + u(sts)^2}$; u(char) is the uncertainty of characterisation; u(bb) uncertainty of homogeneity test; u(lts) uncertainty of stability test long-term; u(sts) uncertainty of stability test short-term. u(lts) and u(sts) are not included in the calculation as the stability statement is based on real evidence opposed to simulation.
Minimum sample: 1 mg is recommended as the minimal sample amount. If less material is used, it is recommended to increase the certified uncertainty by a factor of two for half sample and a factor of four for a quarter of sample.
Intended use: Use this RM as calibrant for chromatography or any other analytical technique.

Analytical Data

Traceability of chromatography: To the International System of Units (SI).

Instrument:	UHPLC/DAD
Detection:	DAD
Column:	LUNA Omega C18 1.6 µm 100 x 2.1 mm
Inj.-Vol.:	2 µl
Flow:	0.5 ml/min
Ret.Time:	8.36 min

Method Details
Eluent A: Acetonitrile
Eluent B: Water

Time[min]	Eluent A [%]	Eluent B [%]
0	40	60
0.3	40	60
8	100	0
9.5	100	0
10	40	60

Comment
Traceability: The balances used are calibrated with weights traceable to the national standards (DKD).
Calibrated class A glassware is used for volumetric measurements.
Water Content: 0.46% (g/g) by Karl-Fischer-Titration (U(exp) = 0.07% (g/g)).
Purity was determined by chromatographic assay, corrected by water content and/or residue solvents.
Identity: EA, NMR, RT, IR, UV, MS
Attachment: Exemplary chromatogram of given method

Certificate Revision 1 - 21.11.2018 - M. Beck

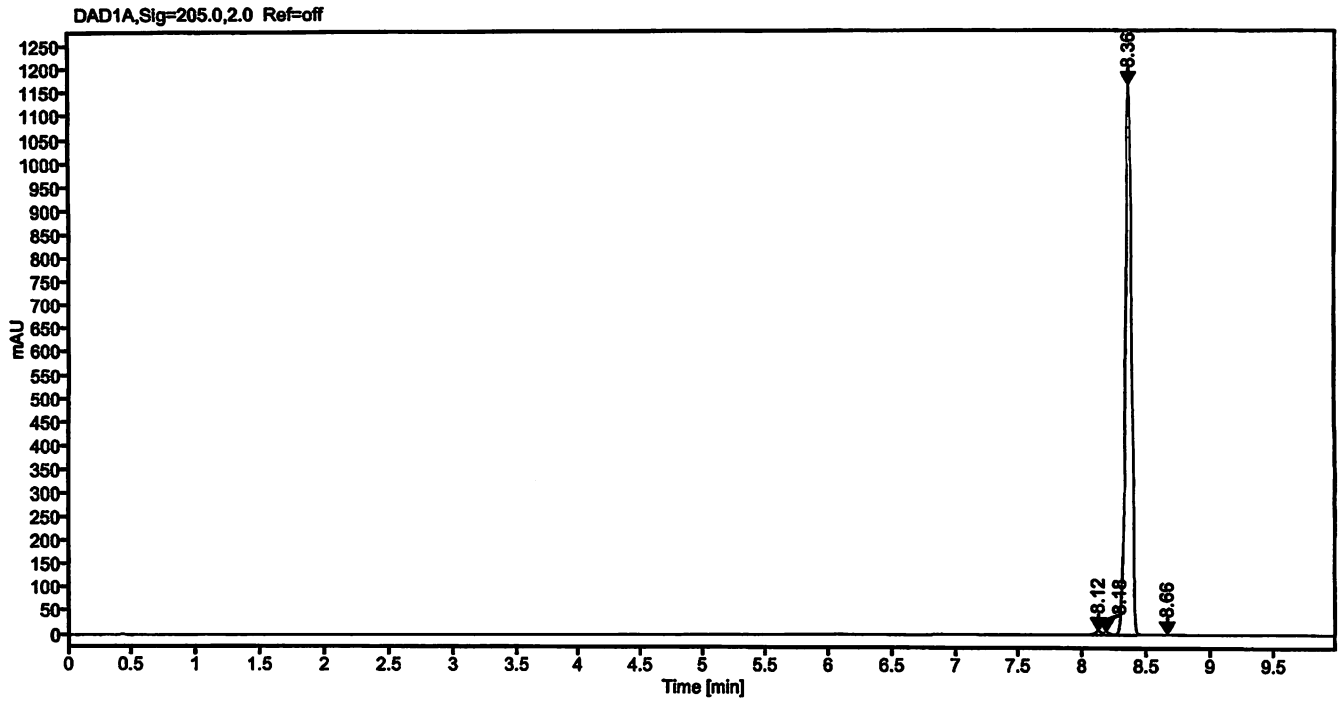
Certified on: 21.11.2018
Certified by: M. Beck
RM Release

The LGC Labor GmbH, accreditated by DAkkS as indicated by the accreditation number D-RM-19883-01 & D-PL-19883-01, has shown competence based on ISO 17034:2017 with relevant parts of DIN EN ISO/IEC 17025:2018 for production of certified reference materials in form of organic pure substances and in form of single and multi-component solutions of organic pure substances.

LGC Labor GmbH - Bgm.-Schlosser-Straße 6A - 86199 Augsburg - Germany
Phone +49 821 906080 - Fax +49 821 9060888 - augsburg.inquiry@lgcgroup.com

Data file:	10010500-03-r001.dx	**Instrument:**	UHPLC 2
		Sequence Name:	21092018-Instabil
Inj. volume [µl]:	2.0	**Injection date:**	9/21/2018 9:43:07 AM
Acq. method:	PAHL.amx	**Location:**	P1-C1

Sample Description Acequinocyl



Signal: DAD1A,Sig=205.0,2.0 Ref=off

Nr.	RT [min]	Area	Height	Area%
1	8.12	31.02534	8.47	0.80
2	8.18	18.68767	6.45	0.48
3	8.36	3810.78756	1162.25	98.65
4	8.66	2.29530	0.46	0.06
	Sum	3862.80		