

Gravimetric Certificate



ISO 17034 Certified Reference Material

Product Identification

Article Code: DRE-L20645000AL
Article Name: Benzo[e]pyrene
Formula: C₂₀H₁₂
Mol. Weight: 252.32
CAS No.: 192-97-2

Lot Number: H989932AL
Expiry Date: 23.11.2021
Storage Temperature: 20°C ± 4°C

Storage and handling: The CRM 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 and light. The expiry date is valid for original sealed bottles under recommended storage conditions only.

Gravimetric Data			
Compound Name:	Lot. No.:	Purity:	Weight:
Benzo[e]pyrene	G150148	98.4 %	7.117 mg
Batch Solvent:	Solvent Lot:	Batch size:	
Acetonitrile	170570479	700.00 ml	
Concentration:	10.00 mg/l	Expanded Uncertainty U:	0.26 mg/l
<p>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 $U(\text{exp}) = u(\text{CRM}) \times k$, where k is the coverage factor at the 95% confidence level ($k=2$). Uncertainty $u(\text{CRM})$ is based on the combination of the uncertainties associated with each individual operation involved in the analysis of the product: $u(\text{CRM}) = \sqrt{u(\text{char})^2 + u(\text{bb})^2 + u(\text{ts})^2 + u(\text{sts})^2}$; $u(\text{char})$ is the uncertainty of characterisation; $u(\text{bb})$ uncertainty of homogeneity test; $u(\text{ts})$ uncertainty of stability test long-term; $u(\text{sts})$ uncertainty of stability test short-term. $u(\text{ts})$ and $u(\text{sts})$ are not included in the calculation as the stability statement is based on real evidence opposed to simulation. Minimum sample: 1 ml 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 CRM as calibrant for chromatography or any other analytical technique.</p>			
Analytical Data			
Traceability of chromatography: To the International System of Units (SI).			
Instrument:	HPLC/DAD	Method Details	
Detection:	DAD	Acetonitrile:Water+0.5% H3PO4 9:1	
Column:	ReproSil 100 C18 5 µm 250 x 3 mm		
Inj.-Vol.:	10 µl		
Flow:	1.0 ml/min		
Ret.Time:	4.59 min		
Comment			
Traceability: The balances used are calibrated with weights traceable to the national standards (DKD). Calibrated class A glassware is used for volumetric measurements.			
Attachment: Exemplary chromatogram of given method			
Certificate Revision 1 - 23.11.2018 - M. Beck			

Certified on: 23.11.2018
Certified by: M. Beck
RM Release

The LGC Labor GmbH, accredited 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.

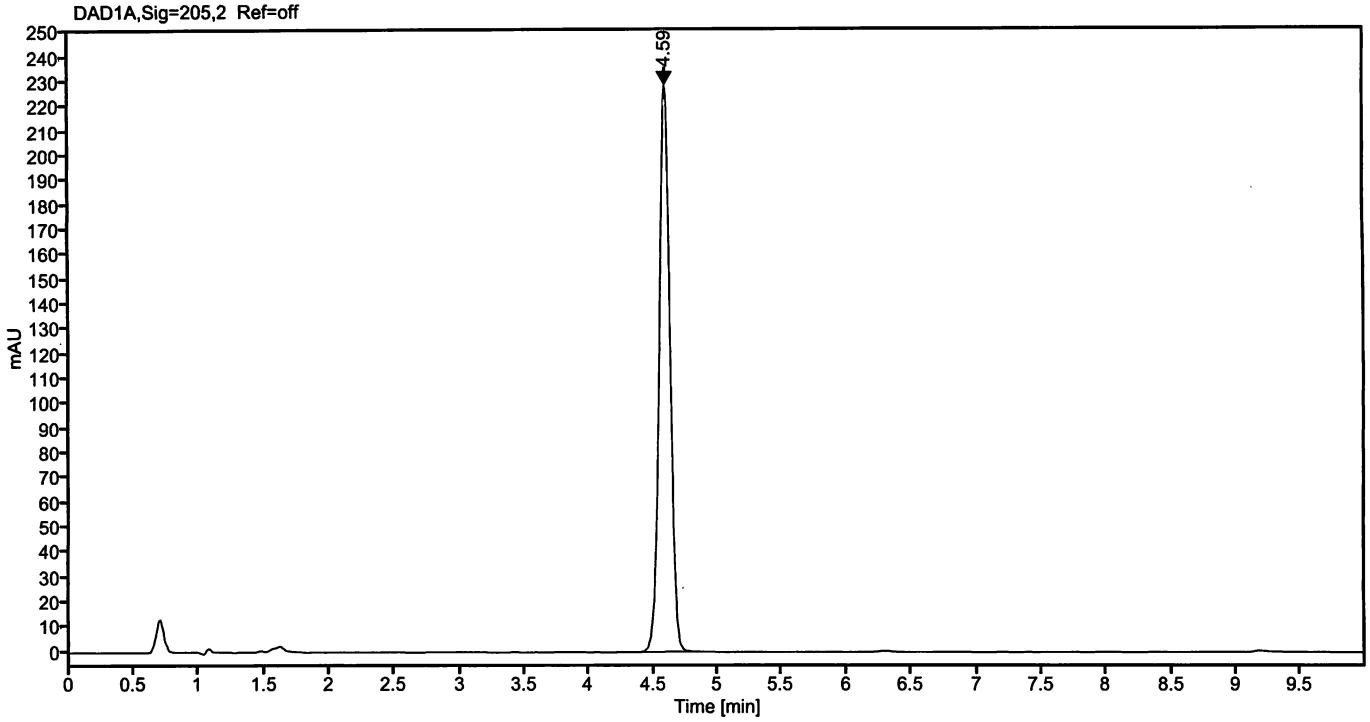
LGC Labor GmbH - Bgm.-Schlosser-Straße 6A - 86199 Augsburg - Germany
Phone +49 821 906080 - Fax +49 821 906088 - augsburg.inquiry@lgcgroup.com
The warranty for this product is limited to the purchasing price of this product.

RMJ

Data file: 20645000-14.dx
Sample name: H989932AL
Inj. volume [µl]: 10.0
Acq. method: S1_91PK_10MIN.amx

Instrument: DAD5
Sequence Name: 22112018-1d
Injection date: 11/22/2018 5:47:38 PM
Location: D2F-A1

Sample Description Benzo[e]pyrene



Signal: DAD1A,Sig=205,2 Ref=off

Nr.	RT [min]	Area	Height	Area%
1	4.59	1325.45124	228.37	100.00
	Sum	1325.45		

MBR