



GRAVIMETRIC CERTIFICATE

Issue Date: 24.03.2022

STD-No. : 14020-10CY5
Product name PAH - Mix 16 (EPA 550, EPA 610)
Concentration : each 10 µg/ml
Solvent : Cyclohexane

Volume 5 ml
Lot-No. : 27910-005
Expiry date : 12/2022¹
Storage : 20°C and dark

only for information purposes

Component	Conc. µg/ml	Purity	CAS	Formula	M [g/Mol]
1 Naphthalene	10±3,5 % ²	99,6 % ³	91-20-3	C10H8	128,17
2 Acenaphthylene	10±3,5 % ²	95,6 % ³	208-96-8	C12H8	152,19
3 Acenaphthene	10±3,5 % ²	99,0 % ³	83-32-9	C12H10	154,21
4 Fluorene	10±3,5 % ²	98,0 % ³	86-73-7	C13H10	166,22
5 Phenanthrene	10±3,5 % ²	98,0 % ³	85-01-8	C14H10	178,23
6 Anthracene	10±3,5 % ²	99,0 % ³	120-12-7	C14H10	178,23
7 Fluoranthene	10±3,5 % ²	98,0 % ³	206-44-0	C16H10	202,25
8 Pyrene	10±3,5 % ²	98,6 % ³	129-00-0	C16H10	202,25
9 Benz(a)anthracene	10±3,5 % ²	99,1 % ³	56-55-3	C18H12	228,29
10 Chrysene	10±3,5 % ²	98,4 % ³	218-01-9	C18H12	228,29
11 Benzo(b)fluoranthene	10±3,5 % ²	99,9 % ³	205-99-2	C20H12	252,31
12 Benzo(k)fluoranthene	10±3,5 % ²	99,3 % ³	207-08-9	C20H12	252,31
13 Benzo(a)pyrene	10±3,5 % ²	99,9 % ³	50-32-8	C20H12	252,31
14 Indeno(1,2,3-cd)pyrene	10±3,5 % ²	99,3 % ³	193-39-5	C22H12	276,33
15 Dibenz(a,h)anthracene	10±3,5 % ²	98,0 % ³	53-70-3	C22H14	278,35
16 Benzo(g,h,i)perylene	10±3,5 % ²	95,0 % ³	191-24-2	C22H12	276,33

This Reference Material was processed under NEOCHEMA's ISO 9001:2015 registered quality system.

This Reference Material is intended as working reference sample for identification of the contained compounds and their quantification in methods of analysis in residue or environmental analysis.

Traceability to the International System of Units (SI) has been established through an unbroken chain of comparisons, each having stated uncertainties. Comparisons are based on convenient physical or chemical measurements, including gravimetric or volumetric dilution. The balances used for these measurements are calibrated by an accredited calibration service.

The homogeneity is determined according to an in-house procedure. There is no minimum sub-sample required.

Sample aliquots for analysis should be withdrawn at roomtemperature and should be processed without delay for the certified values to persist.

¹ The certification of this reference material is valid within the stated uncertainty until the above specified expiration date assumed the reference material is stored in the originally closed flask in accordance with the instructions given in this certificate. No warranty is given until the expiry date for the certificated values after opening. The long term stability may be monitored over the lifetime of the certification according to an in-house procedure. If substantive changes are determined that effect the certification before the expiration of this certificate, NEOCHEMA GmbH will notify the purchaser.

² Expanded Uncertainty according to EURACHEM / CITAC „Quantifying Uncertainty in Analytical Measurement“ with coverage factor k=2 for a confidence level of 95 %.

³ Stated purity of the neat material is considered in the production of the solution.

The production was coordinated by:

Dipl.-Ing. A. Werner (Technical Manager)

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