



CERTIFICATE OF ANALYSIS

1. COMPANY INFORMATIONS

Labsert is an international manufacturer of reference standard materials. All tests and analysis are carried out by ISO/IEC 17025 accredited Labsert's sub-contracted business partner Duzen Norwest Lab. (Turkak Accreditation No: AB-0375-T) and/or Labsert laboratory. Certificate of analysis is presented according to ISO 17034 requirements (Tur Cert. No: 20180718172822). Labsert is registered in reference material producer database (REMBIS) in TURKAK.

2. DESCRIPTION OF CERTIFIED REFERENCE MATERIAL (CRM)

Product Code	PAH1.100.001
Product Name	Acenaphthene [Cas: 83-32-9]
Lot Number	xxxxxx
Concentration	100 mg/l
Matrix	Acetonitrile

3. CERTIFIED VALUE / ADDITIONAL GRAVIMETRIC DATA

CAS No	Component	Purity (%)	¹ Weighed Quantity (g)	Prepared Value (mg/l)	² Certified Value (mg/l)	Uncertainty \pm (mg/l)
83-32-9	Acenaphthene	99	0,0102	102	100,9	1,8

¹ All weights are traceable through NIST to obtain prepared value (NIST Test No: 684/289871-17)

² Certified value of each component = Purity x Prepared Value

4. PREPARATION AND CERTIFICATION INFORMATIONS

4.1. Certified value is obtained by gravimetric and volumetric preparations. Certified concentration is derived from gravimetric analysis and/or It is confirmed against certified reference materials using instrumental methods (GC, GC-MS, HPLC etc.) by ISO 17025 accredited laboratory which is sub-contracted business partner of Labsert. The reported expanded uncertainty of measurement is calculated for a 95% confidence interval using a coverage factor of $k = 2$.

4.2. The reference standard is manufactured using analytical grade organic compounds and high-purity solvents. Solvent which is used for preparation of reference standard is chromatography grade.

5. TRACEABILITY STATEMENT

a. Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparasions all having stated uncertainties (ISO VIM, 2nd ed., 1993, definition 6.10)

b. The measurement results are traceable to SI. All analytical balances are calibrated yearly by ISO 17025 accredited metrology service (TURKAK accreditation no: AB-0076-K) and are verified monthly by an in-house method using NIST traceable analytical weights (NIST Test No: 684/289871-17). Analytical balances are also weekly checked by using Class A laboratory glassware.

c. Automatic equipments are calibrated yearly verified by ISO 17025 accredited metrology service (TURKAK accreditation no: AB-0076-K) and are verified weekly by an in-house method.

6. INTENDED USE

This reference standard solution is for laboratory use only and it is intended for the calibration of analytical instruments such as GC, GC-MS, LC, LC-MS. This reference standard solution is also intended for validation of analytical methods, detection limit and linearity studies, preparation of "working reference samples". This statement is not intended to restrict the use for other purposes.

7. INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

This CRM can be used directly or can be diluted in a feasible solvent. We recommend that you dilute this CRM in same solvent which is appointed in Clause 3. To reach the repeatable and accurate results, analyze this CRM without mixing it with other solutions.

7.1. Stability, Storage and Handling

This certified reference material is used with a guaranteed stability until $\pm 5\%$ of the certified concentration within its shelf life. For the guaranteed stability, keep it in its original packaging and stored according to the information below. The product should be used shortly after opening to avoid concentration changes due to evaporation. Do not pipet from container. Warranty does not apply to a product stored after opening.

Storage Conditions for Stability of CRM: 2 - 8 oC

8. HAZARDOUS INFORMATION

Please refer to Safety Data Sheet (SDS) for hazardous information regarding this certified reference material.

9. HOMOGENEITY

This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. To achieve the sufficient homogeneity, please mix the sample slowly by inversion.

10. EXPIRATION INFORMATIONS

Certification Date: xxxxxx

Retest Date:

Expiration (Month): 24

Expiration Date: xxxxxx

11. NAMES OF CERTIFYING OFFICERS

Prepared By: Buket CAKMAK (Chemical Engineer)
Quality System Officer

Controlled By: Koray CENGİZ (Chemist M.Sc.)
General Manager

Sample CoA



CoA Barcode:

123000000001