

Certificate of Analysis



ISO Guide 34 Reference Material

Product Identification

Article Code: DRE-C13050000

Article Name: DNOC

Formula: C7H6N2O5

Mol. Weight: 198.13

CAS No.: 534-52-1

Lot Number: G978878

Expiry Date: 24.08.2024

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: 99.68% (g/g)

Expanded Uncertainty U= 0.70% (g/g)

The uncertainty of this standard is calculated in accordance with the ISO Guide 34 and EURACHEM/CITAC Guide - Quantifying Uncertainty in Analytical Measurement, Second Edition. The expanded uncertainty is $U(\text{exp}) = u(\text{RM}) \times k$, where k is the coverage factor at the 95% confidence level ($k=2$). Uncertainty $u(\text{RM})$ is based on the combination of the uncertainties associated with each individual operation involved in the analysis of the product: $u(\text{RM}) = \sqrt{u(\text{char})^2 + u(\text{bb})^2 + u(\text{Its})^2 + u(\text{sts})^2}$; $u(\text{char})$ is the uncertainty of characterisation; $u(\text{bb})$ uncertainty of homogeneity test; $u(\text{Its})$ uncertainty of stability test long-term; $u(\text{sts})$ uncertainty of stability test short-term. $u(\text{Its})$ 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 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: HPLC/DAD

Detection: DAD

Column: ReproSil 100 C18 5 µm 250 x 3 mm

Inj.-Vol.: 10 µl

Flow: 1.0 ml/min

Ret.Time: 2.46 min

Method Details

Acetonitrile:Water+0.5% H3PO4 2:1

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: <0.10% (g/g) by Karl-Fischer-Titration ($U(\text{exp}) = 0.03\%$ (g/g)).

Purity was determined by elemental analysis

Identity: EA, NMR, RT, IR, UV

Attachment: Exemplary chromatogram of given method

Certificate Revision 1 - 24.08.2018 - M. Beck

Certified on: 24.08.2018

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 Guide 34:2009 with relevant parts of DIN EN ISO/IEC 17025:2005 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.

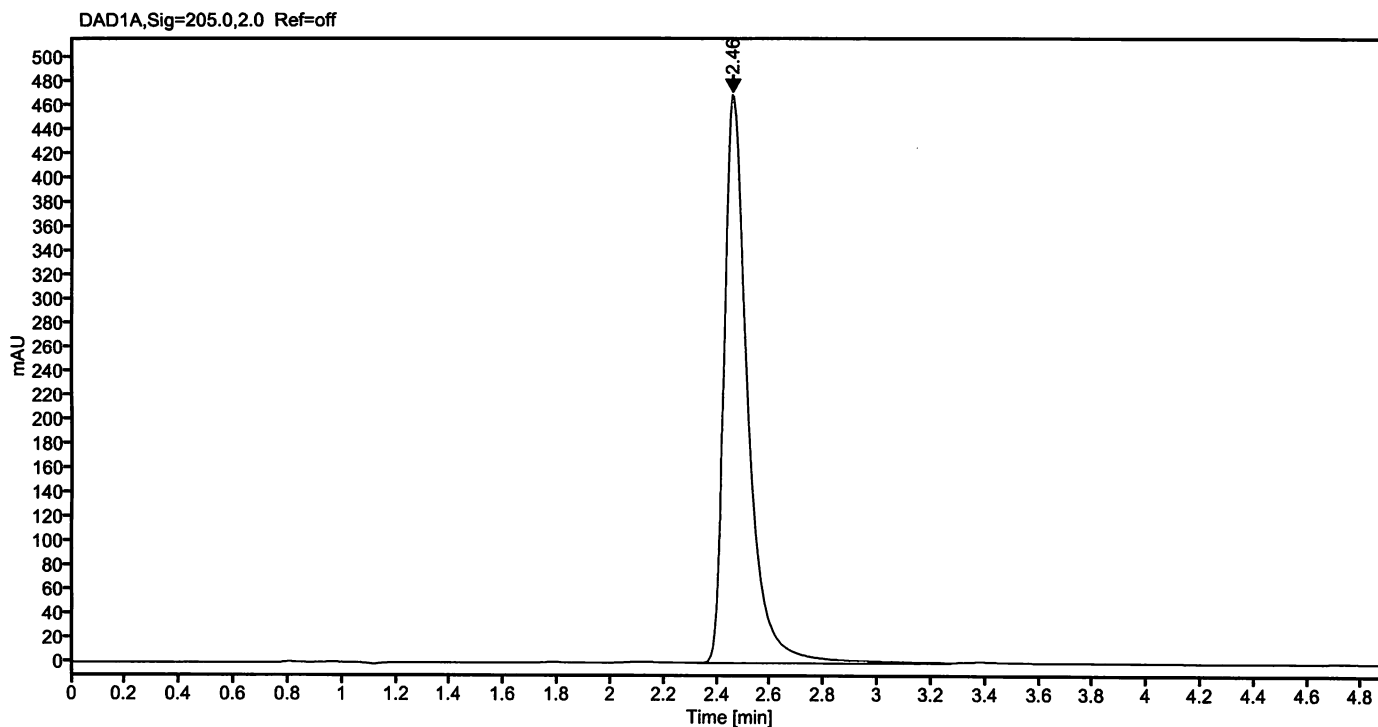
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The warranty for this product is limited to the purchasing price of this product.

Data file: 13050000-18.dx
Sample name: 80724AL G978878
Inj. volume [µl]: 10.0
Acq. method: 21PK.amx

Instrument: DAD3
Sequence Name: 25072018-1a
Injection date: 7/25/2018 2:53:04 PM
Location: 3

1.14

Sample Description DNOC



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

Nr.	RT [min]	Area	Height	Area%
1	2.46	2905.57928	470.45	100.00
	Sum	2905.58		

MB