

Certificate of Analysis



ISO Guide 34 Reference Material

Product Identification

Article Code: DRE-15081500

Article Name: Methoxyphenone

Formula: C₁₆H₁₆O₂

Mol. Weight: 240.30

CAS No.: 41295-28-7

Lot Number:

G173834

Expiry Date:

03.05.2024

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: 99.76% (g/g)

Expanded Uncertainty U= 0.30% (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: GC/FID

Injector: 320°C

Detection: FID

Initial Temp: 120°C for 4 min

Column: Optima-5MS, 0.25 µm, 0.25 mm

End Temp: 320°C for 3 min

Inj.-Vol.: 1 µl

Gradient: 15°C/min

Flow: 1.0 ml/min

Ret.Time: 13.90 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.

Water Content: <0.10% (g/g) by Karl-Fischer-Titration ($U(\text{exp}) = 0.09\%$ (g/g)).

Identity: EA, NMR, RT, IR, MS

Certificate Revision 1 - 03.05.2018 - N. Müller

Certified on: 03.05.2018

Certified by: N. Müller

RM Release

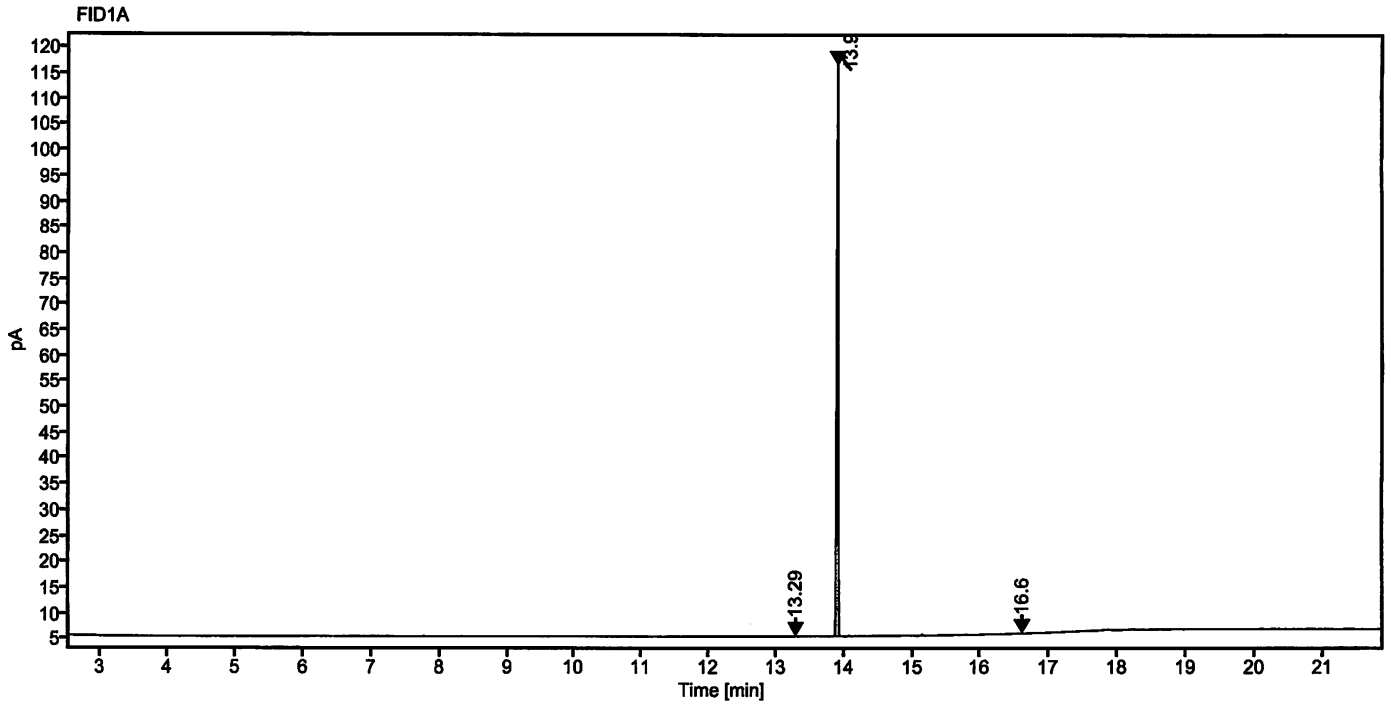
The LGC Labor GmbH, accredited by DAkkS as indicated by the accreditation number D-RM-19883-01 & D-PL-19883-01, has shown competence based on ISO Guide 34:2009 with relevant parts of DIN EN ISO/IEC 17025:2005 for production of certified reference materials in form of organic pure substances and in form of single and multi-component solutions of organic pure substances.

LGC Labor GmbH - Bgm.-Schlosser-Straße 6A - 86199 Augsburg - Germany
Phone +49 821 906080 - Fax +49 821 9060888 - augsburg.inquiry@lgcgroup.com
The warranty for this product is limited to the purchasing price of this product.

03-13-2018

Data file: 15081500-34.dx Instrument: FID 3
Sample name: 80312AL G173834 Sequence Name: 2018KW11-1a
Inj. volume [µl]: 1.0 Injection date: 3/13/2018 7:33:29 AM
Acq. method: PAHK.amx Location: 38

Sample Description Methoxyphenone



| Signal: FID1A | | | | | |
|---------------|----------|-------------|-------------|-------|-------------|
| Nr. | RT [min] | Area [pA*s] | Height [pA] | Area% | Width [min] |
| 1 | 13.29 | 0.16452 | 0.11 | 0.11 | 0.024 |
| 2 | 13.90 | 150.04738 | 111.20 | 99.80 | 0.021 |
| 3 | 16.60 | 0.14342 | 0.11 | 0.10 | 0.016 |
| | Sum | 150.36 | | | |