

Gravimetric Certificate



ISO Guide 34 Certified Reference Material

Product Identification

Article Code: DRE-XA13580100AC
Article Name: Fenthion D6 (O,O-dimethyl D6)
Formula: C₁₀H₉O₃PS₂D₆
Mol. Weight: 284.35
CAS No.: 1189662-83-6

Lot Number: H410346AC
Expiry Date: 02.07.2021
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: Fenthion D6 (O,O-dimethyl D6)	Lot. No.: 153008	Combined Purity: 98.8 %	Weight: 13.153 mg	Chemical Purity: 99.1%	Isotopic Value: 99.7%
Batch Solvent: Acetone	Solvent Lot: 161021610	Batch size: 130.00 ml			

Concentration: 99.96 mg/l Expanded Uncertainty U: 2.09 mg/l

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 $U_{(exp)} = u(CRM) \times k$, where k is the coverage factor at the 95% confidence level ($k=2$). Uncertainty $u(CRM)$ is based on the combination of the uncertainties associated with each individual operation involved in the analysis of the product: $u(CRM) = \sqrt{u(char)^2 + u(bb)^2 + u(lts)^2 + u(sts)^2}$; $u(char)$ is the uncertainty of characterisation; $u(bb)$ uncertainty of homogeneity test; $u(lts)$ uncertainty of stability test long-term; $u(sts)$ uncertainty of stability test short-term. $u(lts)$ and $u(sts)$ 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.

Analytical Data

Traceability of chromatography: To the International System of Units (SI).

Instrument: HPLC/DAD	Method Details
Detection: DAD	Acetonitrile:Water 4:1
Column: ReproSil 100 C18 5 µm 250 x 3 mm	
Inj.-Vol.: 5 µl	
Flow: 1.0 ml/min	
Ret.Time: 2.72 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. Concentration calculated based on isotopic value
Concentration calculation based on Combined Purity = Chemical Purity * Isotopic Value.

Certificate Revision 1 - 02.07.2018 - N. Müller

Certified on: 02.07.2018
Certified by: N. Müller
RM Release

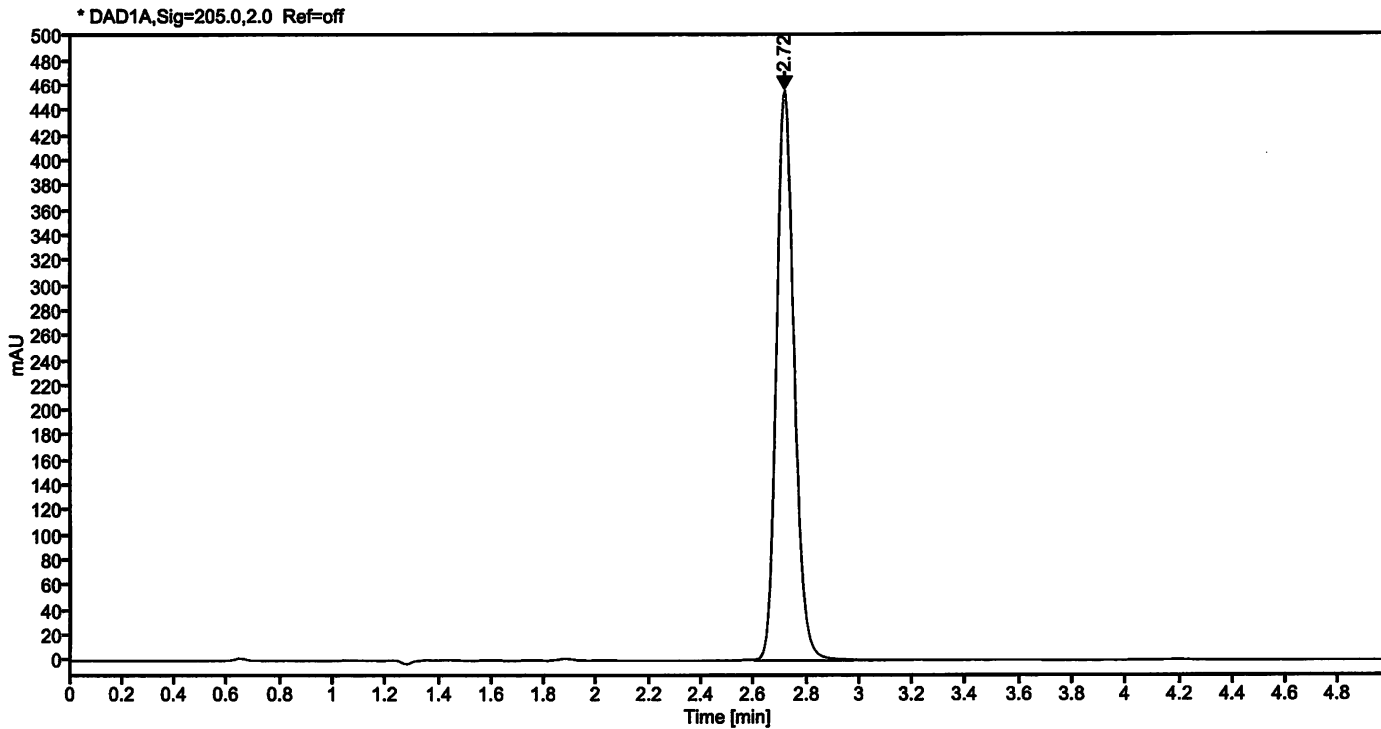
The LGC Labor GmbH, accredited by DAkkS as indicated by the accreditation number D-RM-19883-01 & D-PL-19883-01, has shown competence based on ISO Guide 34:2009 with relevant parts of DIN EN ISO/IEC 17025:2005 for production of certified reference materials in form of organic pure substances and in form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

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

02-03-2018

Data file: 13580100-14.dx Instrument: DAD4
Sample name: H410346AC Sequence Name: 24052018-K
Inj. volume [µl]: 5.0 Injection date: 5/24/2018 7:13:54 PM
Acq. method: 41K.amx Location: 52

Sample Description Fenthion D6 (O,O-dimethyl D6)



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

Nr.	RT [min]	Area	Height	Area%
1	2.72	2154.77986	457.02	100.00
	Sum	2154.78		