

**Certified Reference Material**

This certificate is designed in accordance with ISO 17034 and ISO Guide 31. This certified reference material (CRM) was designed, produced and verified in accordance with ISO/IEC 17025, ISO 17034 and a registered quality management system ISO 9001.

Product Name

Vitamin D3

Product Code

DRE-CA17924000

CAS No.

67-97-0

Mol. Weight

384.64

Mol. Formula $C_{27}H_{44}O$ **Lot Number**

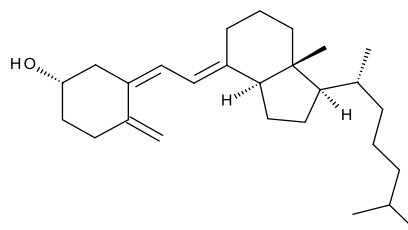
H1576379

Format

Neat

Expiry Date

06 Aug 2028

Storage Temp $-18^{\circ}\text{C} \pm 4^{\circ}\text{C}$ **CERTIFIED**

Purity
99.64% (g/g)

CERTIFIED

Expanded Uncertainty (U)
0.96% (g/g)

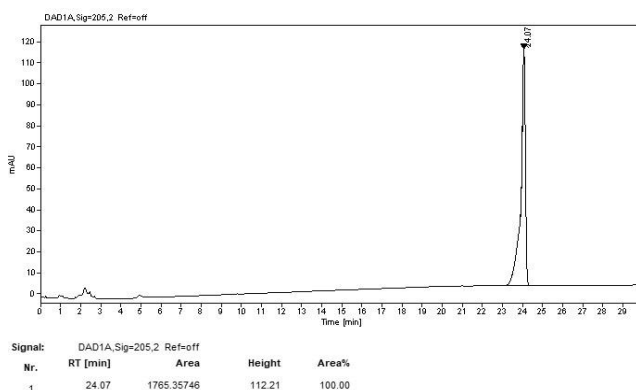
Uncertainty

The certified value(s) and uncertainty(ies) are determined in accordance with ISO 17034 with an 95% confidence level ($k=2$). Uncertainty is based on the Total Combined Uncertainty, including uncertainties of characterisation, homogeneity and stability testing. Stability values are based on real evidence opposed to simulation.

The producer certifies that this certified reference material meets the specification stated in this certificate until the expiry date, provided it is stored unopened at the recommended temperature herein. Product warranties for this certified reference material are set out in the terms and conditions of purchase.

CERTIFIED BY		CERTIFIED ON	
L. Messerschmid		06 Aug 2025	
		RM Release	

CHROMATOGRAM



Instrument

HPLC/DAD

Column

Nucleodur 100 C8, 3 µm, 250 x 4 mm

Method Details

Eluent A: 100% Acetonitrile

Eluent B: 100% Water

Time [min]	Eluent A [%]	Eluent B [%]
0	40	60
1	40	60
17	90	10
22	90	10
27	98	2

Flow

1 mL/min

Method of Characterisation

Purity was determined by elemental analysis

Method of Identification

EA, NMR, RT, IR, UV

Batch Information

Water content below LOQ (<0.08%).

Storage under argon.

Intended Use

This CRM is intended for use in a laboratory as a calibration and quality control standard or in method development for analytical techniques.

Safety

Proper precautions should be observed while handling. See Safety Data Sheet.

Traceability

The balances used for gravimetric measurements are calibrated with weights traceable to the national standards (DKD). The calibration of

the balances is verified daily internally and annually by an external accredited calibration service. Chromatographic methods are traceable to the International System of Units (SI).

Homogeneity

Random replicate samples of the final packaged CRM have been analysed to prove homogeneity compliant with ISO 17034.

Storage

The CRM should be stored in the original sealed container at the indicated temperature.

Instructions for use

It is recommended to use 1 mg as the minimum sample size and if less material is used, to increase the certified uncertainty by a factor of two for half sample and four for a quarter of sample. If storage after opening is necessary, the CRM should be tightly closed and kept from light and moisture. If the CRM was in a sealed ampoule, it should be transferred to a vial with minimum head space. Visit the support section of our website lgcstandards.com for a series of Dr. Ehrenstorfer Tech Tip videos and frequently asked questions.

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LGC Labor GmbH is accredited by DAkkS as reference material producer on ISO 17034 (D-RM-19883-01-00).

All characterisation measurements at LGC Labor GmbH are accredited methods to ISO/IEC 17025.



Deutsche
Akkreditierungsstelle
D-RM-19883-01-00