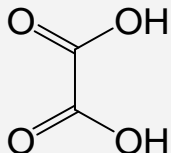


Certificate of Analysis

Reference Substance

Oxalic Acid

Catalogue Number:	LGCFOR0928.01	Long-term Storage:	2 to 8 °C, dark
Lot Number:	33101	Appearance:	white solid
Molecular Formula:	C ₂ H ₂ O ₄	Melting Point:	189 °C
Molecular Weight:	90.03	Assay 'as is':	98.7 %
CAS Number:	[144-62-7]		



Date of shipment: **2016-May-20**

This certificate is valid for two years from the date of shipment provided the substance is stored under the recommended conditions.

Release Date: 2013-08-20

LGC GmbH

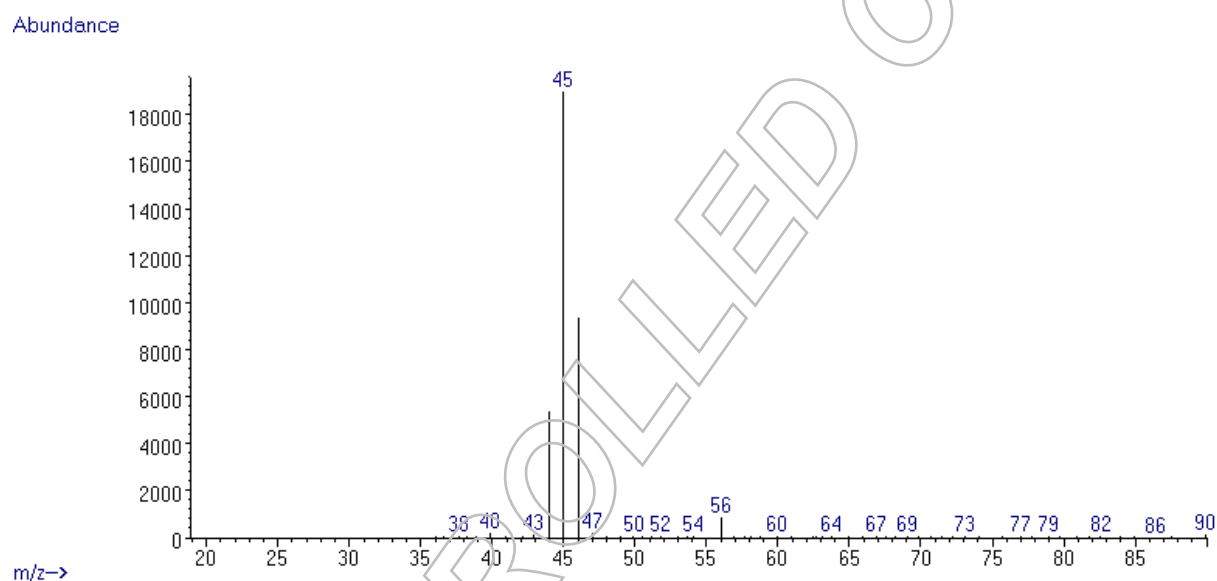
Dr. Sabine Schröder
Product Release

I. Identity

The identity of the reference substance was established by following analyses.

Ia. Mass Spectrum

Method: EI, 70eV, detector temperature: 280 °C

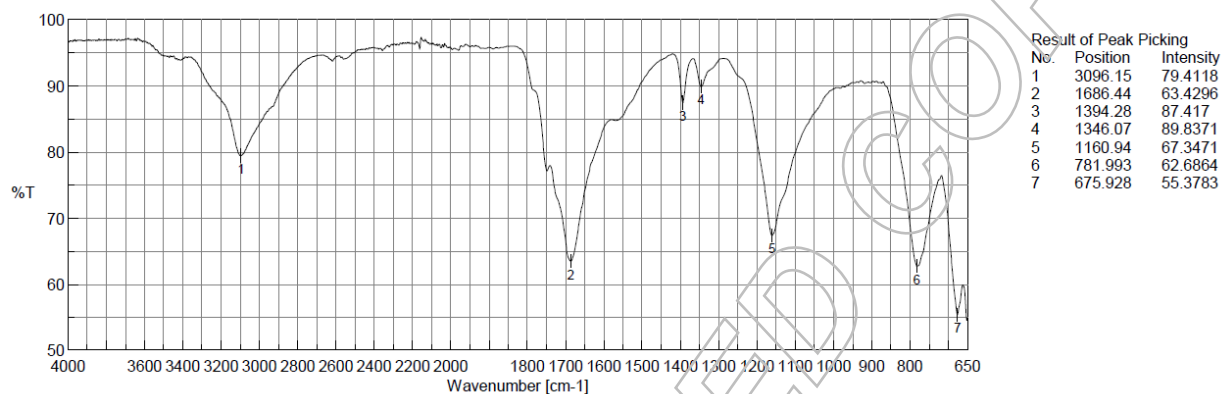


m/z	fragments
90	[M]
45	[COOH]

The signals of the mass spectrum and their interpretation are consistent with the structural formula.

Ib. IR Spectrum

Method: Attenuated Total Reflection Fourier Transform Infrared (ATR-FTIR) Spectroscopy



The signals of the IR spectrum and their interpretation are consistent with the structural formula.

II. Assay

The assay of the reference substance was established by titration.

Conditions:

Titrator Mettler DL 77
Titrant 0.1 M NaOH
Sensor DG 111-SC

Results:

Average 98.67 %
Number of results n=6
Standard deviation 0.28 %

III. Final Result

The assay is assessed to be 98.7 % 'as is'

The assay 'as is' is equivalent to the assay based on the not anhydrous and not dried substance respectively.

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