



Certificate of Analysis

1.09065.0000 Perchloric acid in anhydrous acetic acid, for titrations in non-aqueous media
 $c(\text{HClO}_4) = 0.1 \text{ mol/l}$ (0.1 N) Titripur® Reag. Ph Eur, Reag. USP
Batch HX57696165

	Spec. Values		Batch Values	
Form	liquid		liquid	
Amount-of-substance concentration	0.0995 - 0.1005	mol/l	0.1001	mol/l
Measurement uncertainty	+/- 0.0003	mol/l	+/- 0.0003	mol/l
Water content (according to Karl Fischer)	0.1 - 0.2	%	0.1	%
Traceability	NIST SRM		84L	

The amount-of-substance concentration of this volumetric solution is analyzed by our quality control laboratory of Merck KGaA, Darmstadt, Germany according to DIN EN ISO/IEC 17025.

The concentration is determined by volumetric titration and refers to 20°C.

The amount-of-substance concentration of this volumetric solution is traceable to a primary standard reference material (SRM) from the National Institute of Standards and Technology, Gaithersburg, USA (NIST SRM 84 potassium hydrogen phthalate) by means of volumetric standard potassium hydrogen phthalate (article number 1.02400), certified reference material according to ISO 17034, analyzed by our accredited calibration laboratory of Merck KGaA, Darmstadt, Germany according to DIN EN ISO/IEC 17025. The uncertainty is expressed as expanded measurement uncertainty with a coverage factor $k=2$ covering a confidence level of 95%.

Note: The titer is a correction factor to correct for variations of the volumetric solution, the titration equipment, the temperature and other laboratory conditions. For correct titration results it is recommended to determine a titer with the laboratory specific equipment and under laboratory specific conditions directly after opening a new bottle and at regular time intervals.

Date of release (DD.MM.YYYY) 01.09.2025
Minimum shelf life (DD.MM.YYYY) 30.09.2028

Ayfer Yildirim

Responsible laboratory manager quality control

This document has been produced electronically and is valid without a signature.