



Specification

1.09957.0001 Sodium hydroxide solution for 1000 ml, $c(\text{NaOH}) = 0.5 \text{ mol/l}$ (0.5 N) Titrisol®

Specification

Form	liquid	
Amount-of-substance concentration	0.4950-0.5050	mol/l
Measurement uncertainty	+/- 0.0020	mol/l
Traceability	NIST SRM	

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

The certified value of this volumetric solution was determined with hydrochloric acid standard solution (article number 1.09057). The hydrochloric acid standard solution is standardized and traceable to a primary standard from the National Institute of Standards and Technology, Gaithersburg, USA (NIST SRM 723 Tris(hydroxymethyl)aminomethane) by means of volumetric standard Tris(hydroxymethyl)aminomethane (Art. 1.02408). This volumetric standard is certified by the accredited calibration laboratory of Merck KGaA, Darmstadt, Germany according to DIN EN ISO 17025. The uncertainty is expressed as expanded measurement uncertainty with a coverage factor $k=2$ covering a confidence level of 95%. All measurements are carried out in the accredited calibration laboratory of Merck KGaA, Darmstadt, Germany.

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.

Ayfer Yildirim

Responsible laboratory manager quality control

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