



# Certificate of Analysis

## Certipur<sup>®</sup> Reference Material

*Merck Volumetric Standard*  
**1.02410 Calcium carbonate**  
**Batch No. 102410H**

Secondary Reference Material for the complexometry  
traceable to Standard Reference Material of NIST  
(National Institute of Standards and Technology, USA).

Merck volumetric standards are used for the adjustment and control of volumetric solutions. They are manufactured under stringently controlled conditions in order to guarantee the highest quality standards. The general standard corresponds at least to the "GR" grade. Its suitability for use as a volumetric standard is based on a direct comparison with Standard Reference Material obtained from NIST.

**The assay of this batch is**

**99.98%**

- Measurement uncertainty:  $\pm 0,05\%$  (coverage factor  $k=2$  ; confidence level 95%).
- The content indicated is based on a molecular mass  $M = 100.09$  g/mol dried substance.
- Directly traceable of NIST SRM Zinc batch 682
- Volumetric standard of standardisation of volumetric solutions in accordance to the chapter reagents of the Pharmacopoeia ( USP ).
- Standardisation was carried out using ethylenediaminetetraacetic acid disodium salt (EDTA -Na<sub>2</sub>) as titration solution using a potentiometric procedure.
- Drying: When used as a volumetric standard, the calcium carbonate must be dried at 120°C for 2 hours.
- Storage: The volumetric standard should be stored at room temperature (+15 to +25°C) tightly closed (in the original container) and protected from light and moisture.
- The original unopened container may be used until: 31.03.2015

**Date of release: 18.03.2010**

**Dr. Stefan Frey**  
(responsible laboratory manager quality control)