



Certificate of Analysis

Certipur[®] Reference Material

Merck Volumetric Standard
1.02401 Benzoic acid
Batch No. 112401G

Secondary Reference Material for the alkalimetry
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 acidimetric assay of this batch is

100.05 %

- Measurement uncertainty: $\pm 0,05\%$ (coverage factor $k=2$; confidence level 95%).
- The content indicated is based on a molecular mass $M = 122.123$ g/mol dried substance.
- Directly traceable of NIST SRM benzoic acid batch 350b.
- Volumetric standard for standardisation of volumetric solutions in accordance to the chapter reagents of the Pharmacopoeia (Ph Eur, USP, JP).
- Standardisation was carried out using sodium hydroxide solution as titration solution using a potentiometric procedure.
- Drying: When used as a volumetric standard, the benzoic acid must be kept 24 h in a desiccator above a drying agent with a moisture indicator.
- 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: 31.05.2016

Date of release: 31.05.2011

Dr. Stefan Frey
(responsible laboratory manager quality control)