



Material	32096.400
Material description	Buffer solution (phosphate buffer) pH 7.00 ± 0.02 (20°C)
Grade	

## Additional information

Characteristics	Specifications
pH (20°C) (tolerance ± 0.02)	6.98 - 7.02
pH laboratory uncertainty	± 0.005 (k=1)
pH homogeneity uncertainty	± 0.002 (k=1)
pH stability uncertainty	± 0.002 (k=1)
pH expanded uncertainty	± 0.02 (k=2; 95 %)

## Signature

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

Jessie Pijck, Head of Laboratory - Haasrode  
VWR International bv; Geldenaaksebaan 464; BE-3001  
Leuven; Belgium

## Certified Reference Material ISO 17034



Accreditation N°: 542-RM  
VWR International bv  
Geldenaaksebaan 464  
BE-3001 Leuven, Belgium  
Coverage available on: [www.belac.be](http://www.belac.be)

## Additional information

**pH-Method:** pH value is analyzed with a glass electrode after 4-point calibration following the validated standard procedure. The expanded uncertainty relevant for the user contains contributions of bottle to bottle variation (inhomogeneity), stability over time and laboratory measurement uncertainties as shown above and using a coverage factor k=2 for a 95 % coverage probability.

**Preparation and use:** This reference material is prepared gravimetrically from potassium di-hydrogen phosphate, di-sodium hydrogen phosphate and high purity water. It is intended to be used for calibrating pH measurement devices.

**Accreditation:** VWR International bv is accredited as reference material producer according to ISO 17034. The batch homogeneity has been proven by analyzing minimum 6 samples distributed over the entire production process.

The pH of this buffer solution is traceable to and verified against primary Standard Reference Materials (SRM) from National Institute of Standards and Technology (NIST): SRM 186 I + II + SRM 187.

This product is packed under nitrogen to sustain the shelf life. Maintenance of the nitrogen blanket after container has been opened is recommended. Store at +15°C to +25°C tightly closed in the original container and consume within 4 weeks after first opening.