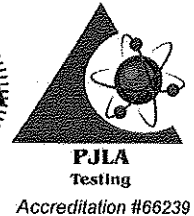




# Certificate of Analysis



Mesa Laboratories Inc  
 12100 West 6<sup>th</sup> Ave., Lakewood, CO 80228  
 TEL (303) 987-8000 FAX (303) 987-8989  
[www.mesalabs.com](http://www.mesalabs.com)

Description: Standard Buffer Solution 4.0 pH @ 25°C  
 Part Number: 02.0032  
 Lot No: ML-P4-1112  
 Certification Date: July 12, 2012  
 Expiration Date: December 31, 2013

Nominal Value (pH Units)	Measured Value (pH Units)	Tolerance @ 25°C (pH Units)	Measured Value In Tolerance	Reference System Standards	Reference System Uncertainty @ 25°C (pH Units)
4.0000	4.0050	±0.01	Yes	NIST SRM 186 NIST SRM 191	± 0.006

### Test Methods

- All analytical balances are calibrated by an ISO/IEC 17025:2005 accredited calibration laboratory. All balances are checked prior to use using an in-house procedure. Weights used for testing are traceable to NIST.
- All thermometers are NIST traceable through reference temperature probes that are calibrated by an ISO/IEC 17025:2005 accredited calibration laboratory.
- Measurements are taken at 25°C ± 0.25°C using EPA Method 150.1 and are temperature compensated.
- Uncertainty is calculated using an Expanded Uncertainty U=kuc (k=2.00).

### Intended Use

This standard solution is indicated for use as a secondary standard for calibrating pH meters.

### Hazardous Information

Please refer to the Material Safety Data Sheet available on our website for information on this material

### Stability and Storage

Protect from temperature extremes. Discard if solution has been frozen. Do not return used solution into the container. Keep cap tightly sealed when not in use. Discard 90 days after opening.

### Conformance Statement

Mesa Laboratories Inc certifies that the above referenced product was tested using the N.I.S.T. traceable standards listed above, and meets or exceeds all published specifications as printed on the product label.

  
 Jamie Louie  
 Quality Manager

  
 Doug Weerstra  
 Laboratory Manager