

# CERTIFICATE OF CALIBRATION



Calibration Certificate

1001931766

Certification Number

Gage ID 8209  
Type BUBBLE-O-METER/MICRO METER  
Company BUBBLE-O-METER, LLC.  
9340 ROSETO VILLA DRIVE  
DUBLIN, OH 43016

Manufacturer BUBBLE-O-METER, LLC  
Model Number 1.1mL MICRO  
Serial Number 8209  
Size 1.1mL  
Department N/A  
Cal Date 11/18/2016

Calibrated By: DJB Gage Calibrated

Temp 68.6°F Humidity 39.0%RH  
Standard Used GR2026  
Proc: PMC0429

Authorized By:

This is to certify that the above instrument was calibrated by using standards traceable to the National Institute of Standards & Technology (NIST). The results indicated on this certificate relate only to the item(s) calibrated. is accredited to ISO/IEC 17025:2005 through A2LA which satisfies all requirements of ISO 9001:2008 & ANSI/NCSL Z540-1:1994. Unless otherwise stated, all of the parameters calibrated on this certificate are within scope of accreditation. The expanded measurement uncertainty is reported at k=2, 95% confidence level. This certificate and attachments may not be reproduced, except in full, without the written approval of.

CALIBRATION STD(s)	DESCRIPTION	Cal Due Date	Test Report#
FG0101	SCALE BALANCE SARTORIUS MC 410 S	11/30/2016	1001786581
ED0369	THERMOMETER ERTCO 1004-3	11/30/2017	1001785565
DISTILLED WATER	DISTILLED WATER	--/--/----	-----

### TOLERANCE

PER MANUFACTURER'S SPECIFICATIONS:  $\pm 3\%$  FOR 1ml RANGE  
 $\pm 0.5\%$  FOR 10mL RANGE AND ABOVE  
THIS CALIBRATION HAS BEEN PERFORMED IN ACCORDANCE WITH ASTM E694  
SEE ATTACHED REPORT FOR READINGS

### CONDITION

RECEIVED WITHIN MANUFACTURER'S SPECIFICATIONS  
RETURNED WITHIN MANUFACTURER'S SPECIFICATIONS

### MEASUREMENT UNCERTAINTY

The expanded measurement uncertainties for Bubble-O-Meters are available on the attached performance verification report.

Unless otherwise stated, measurements have been compared to the unmodified tolerances and dimensional values are referenced to 68°F.

responsibility shall in no event, nor for any cause whatsoever exceed the purchase price of this certification. Last Page unless stated.

-----Last Page-----

Bubble-O-Meter, LLC	
Company	
Bubble-O-Meter, Micro	
Make/Model	
8209	1001931766
Gauge ID#	Attached to Certificate

Barometric Pressure: 30.34 inHg

Room Temperature: 68.6 °F

Humidity: 39 %

Water Temperature: 64.8 °F

Micro	Nominal	Actual	Error	Minimum	Maximum	Test Result	UNC
		Weight/Volume					
		g/mL	%				mL
1 mL	1	1.019	1.9	0.98	1.02	Pass	0.0026
Full Scale	1.1	1.120	0.9	1.078	1.122	Pass	0.0029

Known uncertainty across any range of Bubble-O-Meter is 0.25%