

CALIBRATION CERTIFICATE

Customer Name & Address : Precise Healthcare
No.27/1,4th Main Road,Hosakerehalli,
Dattareya Nagar,BSK 3rd Stage,Bangalore-560085

Customer's Reference: **SRF No.:** 1420 **Dated** : 05 Aug 2023

Calibration Certificate Number	Calibrated On	Recommended Calibration Due	Page Number
UC/23/1420-02	05 Aug 2023	04 Aug 2024	1 of 2

ULR No CC299623000002608F

Date of issue: 11 Aug 2023

Details of device under calibration (DUC):

DUC : Micro Pipette	Calibration Procedure No. : UC/CAL/205
Make : Dragon Lab	No. of Pages : 2
Range : 100-1000µl	DUC Received : 05 Aug 2023
SI No. : YE217AS0261642	DUC Condition on receipt : Satisfactory
ID No. : ---	Cal At : Mass Lab.Ultracal

Environmental Conditions: Temp. :(23 ± 2)°C ,Relative Hum.:(40 to 60)%, Atm.Pressure:911.9mbar

Standards used:

Sl. No.	Nomenclature	Make	Sl. No/ID No	Traceable to/ Cert. No.	Validity
1	Electronic Balance	Radwag	573977	LCGC / TC/10332/2023	04 July 2024

Note:

- 1.The Calibration Certificate relates only to the above DUC
- 2.Publication or reproduction of this certificate in any form other than by complete set of the whole certificate & in the language, written, is not permitted without the written consent of Ultracal.
- 3.Corrections/erasing, invalidate the Calibration certificate
- 4.Calibration of the DUC are traceable to National standards/International Standards
- 5.Any error in this certificate should be brought to our knowledge within 45 days from the date of this certificate.
- 6.Results Reported are valid at the time of and under the stated conditions of measurements.
- 7.The usage of NABL Symbol is as per NABL guidelines NABL 133

Calibrated By


Spoorthi.N.M
(Calibration Engineer)



Authorised By


Shreyas.B.V
(Technical Manager)

ULR No: CC299623000002608F

Range : 100 - 1000 μ l

Increment : 10 μ l

Sl. No.	Micropipette Set Volume in μ l	Standard Balance Reading in g	Actual Calculated Volume @ 27°C in μ l	Average Volume in μ l	Systematic Error, \pm in μ l	Random Error, in \pm in μ l
1	100	0.09976	100.11	99.90	-0.10	0.15
2		0.09944	99.79			
3		0.09971	100.06			
4		0.09939	99.74			
5		0.09958	99.93			
6		0.09933	99.68			
7		0.09962	99.97			
8		0.09954	99.89			
9		0.09943	99.78			
10		0.09973	100.08			
11	500	0.49737	499.12	499.59	-0.41	0.48
12		0.49778	499.53			
13		0.49808	499.83			
14		0.49773	499.48			
15		0.49836	500.11			
16		0.49853	500.28			
17		0.49787	499.62			
18		0.49701	498.76			
19		0.49824	499.99			
20		0.49739	499.14			
21	1000	0.99664	1000.14	1000.63	0.63	1.11
22		0.99892	1002.43			
23		0.99582	999.32			
24		0.99817	1001.68			
25		0.99689	1000.39			
26		0.99783	1001.34			
27		0.99601	999.51			
28		0.99834	1001.85			
29		0.99599	999.49			
30		0.99667	1000.17			

Measurement Uncertainty : \pm 0.30 μ l upto 100 μ l
 Conclusion / Remarks: 1.27 μ l above 100 μ l

- 1 Measurement uncertainty is at confidence level 95% which corresponds to a coverage factor of k= 2.23
- 2 Calibration is performed as per ISO 8655 - 6 : 2002 (E)
- 3 Gravimetric Method is adopted for calibration

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Spoorthi.N.M

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Shreyas.B.M

(Technical Manager)