



Ultra Cal

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# 42, 1st Floor, 60 Feet Main Road, Srinivasanagar,  
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info@ultra-cal.com



## CALIBRATION CERTIFICATE

**Customer Name & Address :** Prakash Diagnostic Laboratory.,  
# 11A,(76)Opp Shell Petrol Bunk,Near Royal Mart,  
Bydarahalli,Magadi Main Road,Bengaluru-560091

**Customer's Reference:** SRF No.: 1546 **Dated** :23 Dec 2022

Calibration Certificate Number	Calibrated On	Recommended Calibration Due	Page Number
UC/22/1546-02	23 Dec 2022	22 Dec 2023	1 of 2

ULR No.: CC299622000003268F

Date of Issue: 24 Dec 2022

### Details of device under calibration (DUC):

<b>DUC</b> : Micro Pipette	<b>Calibration Procedure No.</b> : UC/CAL/205
<b>Make</b> : Superfit XL	<b>No. of Pages</b> : 2
<b>Range</b> : 5-50 $\mu$ l	<b>DUC Received</b> :23 Dec 2022
<b>SI No.</b> : RE644767	<b>DUC Condition on receipt</b> : Satisfactory
<b>ID No.</b> : ---	<b>Cal At</b> : Mass Lab.Ultracal

**Environmental Conditions:** Temp. :(23  $\pm$  2) $^{\circ}$ C ,Relative Hum.:(40 to 60)%, Atm.Pressure:910.2mbar

### Standards used:

SI. No.	Nomenclature	Make	SI. No/ID No	Traceable to/ Cert. No.	Validity
1	Electronic Balance	Radwag	573977	LCGC / TC/8496/2022	04 July 2023

### 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)

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Range : 5-50  $\mu$ l  
Increment : 0.5  $\mu$ l

Sl. No.	Micropipette Set Volume in $\mu$ l	Standard Balance Reading in g	Actual Calculated Volume @ 27°C in $\mu$ l	Average Volume in $\mu$ l	Systematic Error, $\pm$ in $\mu$ l	Random Error, in $\pm$ in $\mu$ l
1	10	0.00996	10.00	9.92	-0.08	0.06
2		0.00983	9.86			
3		0.00990	9.93			
4		0.00982	9.85			
5		0.00989	9.92			
6		0.00993	9.96			
7		0.00984	9.87			
8		0.00992	9.95			
9		0.00978	9.81			
10		0.00995	9.98			
11	25	0.02538	25.47	24.97	-0.03	0.22
12		0.02481	24.90			
13		0.02473	24.82			
14		0.02502	25.11			
15		0.02483	24.92			
16		0.02470	24.79			
17		0.02460	24.69			
18		0.02487	24.96			
19		0.02491	25.00			
20		0.02501	25.10			
21	50	0.05008	50.26	50.44	0.44	0.15
22		0.05026	50.44			
23		0.05047	50.65			
24		0.05025	50.43			
25		0.05011	50.29			
26		0.05018	50.36			
27		0.05037	50.55			
28		0.05051	50.69			
29		0.05027	50.45			
30		0.05009	50.27			

Measurement Uncertainty :  $\pm$  0.30  $\mu$ l

**Conclusion / Remarks:**

- 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

(Calibration Engineer)



Authorised By



(Technical Manager)