



GANATHI INSTRUMENTS

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CC-2633

CALIBRATION CERTIFICATE

Customer Name & Address: M/s. Shree Raksha Labs Private Limited
#46, 17th Cross, Between Margosa Road and Sampige Road,
Malleshwaram, Bangalore-560055

Customer's Reference: ----

ULR No : CC263322000015220F

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SRF No	Cal Cert Number	Calibrated On	Recommended cal due	Certificate Issued Date
576	GI/22/576-03	30.07.2022	29.07.2023	02.08.2022

Details of device under calibration (DUC):

DUC	: Micropipette	Format No	: GI/FF-20-304
Make / Model	: Superfit XL	Cal Procedure No	: GI/CAL/304
Range	: 100 µl to 1000 µl	DUC Received	: 28.07.2022
Lc	: 5 µl	DUC Condition	: Satisfactory
SI No./ ID No.	: OH514844	Cal At	: Mass Lab, GI

Environmental Conditions:

Temperature : 23 ± 1.5°C

Humidity : 40 to 60 % RH

Standards used:

Sl. No.	Nomenclature	Make	SI/ID No	Traceable to	Certificate no	Validity
1	Weighing Balance	Radwag	GI/WB/01	CC-2231	TSC/21-22/13894-2	29.12.2022

Note:

1. Decision Rule has been referred from Manufacturer Specification / Data sheet or as specified by the Customer.
2. The Calibration Certificate relates only to the above DUC
3. This report refers only to the items/gauges submitted and may not be reproduced except in full without written permission from Ganathi Instruments.
4. Corrections/erasing, invalidate the calibration certificate
5. Calibration of the DUC are traceable to National standards/International Standards
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 given in NABL-133.

Calibrated By

Chaitra T

(Calibration Engineer)

Authorised By

Swetha K. V.

(Quality Manager)



Cal Cert Number : GI/22/576-03

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I. Mechanical Calibration : Volume

Range : 100 μ l to 1000 μ l

Results:-

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 %	Random Error, in \pm in %
1	100	0.09957	99.87	99.79	-0.21	0.26
2		0.09936	99.66			
3		0.09974	100.04			
4		0.09925	99.55			
5		0.09996	100.26			
6		0.09961	99.91			
7		0.09945	99.75			
8		0.09938	99.68			
9		0.09906	99.36			
10		0.09955	99.85			
11	600	0.59758	599.39	599.45	-0.09	0.12
12		0.59824	600.05			
13		0.59736	599.17			
14		0.59705	598.86			
15		0.59793	599.74			
16		0.59825	600.06			
17		0.59703	598.84			
18		0.59874	600.55			
19		0.59642	598.23			
20		0.59775	599.56			
21	1000	0.99657	999.59	999.57	-0.04	0.08
22		0.99702	1000.04			
23		0.99698	1000.00			
24		0.99768	1000.70			
25		0.99501	998.02			
26		0.99622	999.24			
27		0.99568	998.70			
28		0.99647	999.49			
29		0.99673	999.75			
30		0.99711	1000.13			

Measurement Uncertainty : $\pm 0.5 \mu$ 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.

***** End of Certificate*****

Calibrated By


Chaitra T

(Calibration Engineer)

Authorised By


Swetha K. V.
(Quality Manager)