



CALIBRATION REPORT

AGAPPE

ADL/MO/SER/0230/23-24

Customer: UPC Diagnostic Centre, Vadamadurai.

Serial No. 212030336568

Model : Mispa Viva

DOI : 23/04/2021

Date of Calibration : 03/11/2023

INSTRUMENT CONTROL

Visual Control: PASSED

Zero Drift after 1 Hour of zero setting (WL=340nm) 0.001

PHOTOMETRIC LINEARITY

Solution	WL (nm)	100%	75%	50%	25%
Potassium dichromate	340nm	100.2	74.6	51.8	25.2
P-Nitrophenol	405nm	100.4	74.5	50.3	25.8
Cobaltous Ammonium Sulphate	505nm	100.8	76.9	50.1	24.7

CHEMISTRY CONTROL

	TEST	REAGENT	CONTROL SERUM	THEORETICAL VALUE	READ VALUE	RANGE
END POINT	Triglyceride	Triglyceride	Lot No: 32307084 Expiry: 02/2025	435	398	358 - 512
KINETIC	Glucose	Glucose	Lot No: 32307084 Expiry: 02/2025	214	244.25	169 - 259
FIXED TIME	Creatinine	Creatinine	Lot No: 32307084 Expiry: 02/2025	2.35	2.25	1.75 - 2.95

Validity: 6 months from the date of calibration – 02/05/2024

For, Agappe Diagnostics Ltd,
Authorized Signatory



Name: Anbarasu.R

Designation: Assistant Manager - Customer service

AGAPPE DIAGNOSTICS LTD.

ISO 9001:2015 | EN ISO 13485:2016 CERTIFIED COMPANY | CIN : U24239MH1998PLC115413

CORPORATE OFFICE / REAGENT PLANT

Agappe Hills, Pattimattom (PO), Dist. Ernakulam, Kerala - 683 562, India.
Tel: +91 484 286 7000 | Email: agappe@agappe.in

EQUIPMENT PLANT

X/588-CB, Block No. 32, KINFRA Small Industrial Park,
Nellad, Cochin, Kerala, India - 686 721. Tel: +91 484 276 7477.

KOLKATA OFFICE

406, Merlin Matrix, Plot No-10, Block-DM, Sector V,
Salt Lake City, Kolkata - 700 091.
Tel: +91 33 4003 0451 | Email: kolkataoffice@agappe.in

MUMBAI (REGISTERED OFFICE)

401 & 402, 4th Floor, Lakshmi Business Centre, 119

DELHI OFFICE

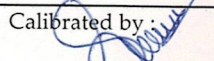
DSM 540, 5th Floor, DLF Tower, Shivaji Marg.

BANGALORE OFFICE

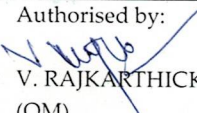
5-6, 11th Floor, Red Cross Bhavan, No-26 RRP Course Road.

CALIBRATION CERTIFICATE

EQN/FT/7.8/01		Page 1 of 2	
CRF No.	: EQN/CRF/2311065	Date of Calibration	: 06-Nov-23
Certificate No	: 2023-24/EQN/2311065-01	Recom. Due Date	: 05-Nov-24
ULR No.	: CC276023000018036F		
Customer Details		Calibrated at	
M/s. UPC X - RAY, ECG & Diagnostic Center		Lab	
Meetuplayam Road, Opp NGGO Colony,		Date of Receipt : 06-Nov-23	
Vadamadurai (Post),		Cond. On Receipt : Satisfactory	
Coimbatore - 641 017		Date of Issue : 09-Nov-23	
Details of UUC :			
Description	: Micropipette	Model No.	: --
Range	: 10 - 100 μ l	Serial No	: --
Least Count	: 1 μ l	Identification No.	: --
Make	: Diagonpette	Accuracy	: As per Manual
Working range	: --	Location	: Lab
Details of Standard Used			
Name	Certificate No.	Valid upto	Traceability
Electronic Micro Balance	2023-24/EQN/2306104-64	21-Jun-24	EQN, Chennai.
CP No.	: EQN/CP/MS-03	Reference Standard : ISO 8655-6	
Environmental Details	: Temperature : 25 \pm 2 $^{\circ}$ C	Relative Humidity : 50 \pm 10 % RH	
MECHANICAL CALIBRATION			
(Volume)			
Calibration Results			
1. Lower Volume :	10 μ l	No. of Measurements :	10
<input type="text" value="9.831"/>	<input type="text" value="9.871"/>	<input type="text" value="9.901"/>	<input type="text" value="9.962"/>
<input type="text" value="9.871"/>	<input type="text" value="9.901"/>	<input type="text" value="9.851"/>	<input type="text" value="9.952"/>
<input type="text" value="9.931"/>	<input type="text" value="9.891"/>		
Mean Value :	9.896 μ l		
Error Limits(\pm)			
Systematic Error :	-0.10 μ l	0.12 μ l	
Systematic Error :	-1.04 %	1.20 %	
Random Error :	0.04 μ l	0.08 μ l	
Random Error :	0.42 %	0.80 %	
Measurement Uncertainty :	\pm 0.37 μ l		

Calibrated by :

SANGEERTH K P
 (Calibration Engineer)



Authorised by:

V. RAJKARTHICK
 (QM)


CALIBRATION CERTIFICATE

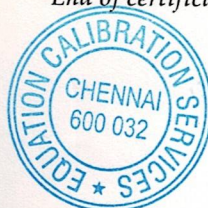
CRF No. :	EQN/CRF/2311065	Page 2 of 2
ULR No. :	CC276023000018036F	
MECHANICAL CALIBRATION		
(Volume)		
Calibration Results		
2. Middle Volume :	50 μ l	No. of Measurements : 10
50.157	50.096	50.096
50.237	50.247	50.126
50.137	50.167	50.197
50.137	50.167	50.187
Mean Value :	50.165 μ l	
Error Limits(\pm)		
Systematic Error :	0.16 μ l	0.50 μ l
Systematic Error :	0.33 %	1.00 %
Random Error :	0.05 μ l	0.20 μ l
Random Error :	0.11 %	0.40 %
Measurement Uncertainty :	\pm 0.37 μ l	
3. Nominal Volume :	100 μ l	No. of Measurements : 10
100.404	100.353	100.434
100.384	100.474	100.353
100.404	100.373	100.343
100.404	100.373	100.434
Mean Value :	100.396 μ l	
Error Limits(\pm)		
Systematic Error :	0.40 μ l	0.80 μ l
Systematic Error :	0.40 %	0.80 %
Random Error :	0.04 μ l	0.30 μ l
Random Error :	0.04 %	0.30 %
Measurement Uncertainty :	\pm 0.37 μ l	

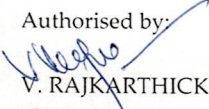
Remarks

1. The reported Expanded Uncertainty is calculated at 95.45 % C.L with coverage factor $k=2$
- 2 The Above Results are within the maximum permissible Error

End of certificate

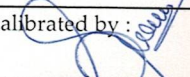
Calibrated by :

 SANGEETHA K R
 (Calibration Engineer)

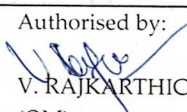


Authorised by:

 V. RAJKARTHICK
 (QM)

CALIBRATION CERTIFICATE

EQN/FT/7.8/01		Page 1 of 2	
CRF No.	: EQN/CRF/2311065	Date of Calibration	: 06-Nov-23
Certificate No	: 2023-24/EQN/2311065-02	Recom. Due Date	: 05-Nov-24
ULR No.	: CC276023000018037F		
Customer Details		Calibrated at	: Lab
M/s. UPC X - RAY, ECG & Diagnostic Center		Date of Receipt	: 06-Nov-23
Meetuplayam Road, Opp NGGO Colony,		Cond. On Receipt	: Satisfactory
Vadamadurai (Post),		Date of Issue	: 09-Nov-23
Coimbatore - 641 017			
Details of UUC :			
Description	: Micropipette	Model No.	: --
Range	: 100 - 1000 μ l	Serial No	: 295214
Least Count	: 5 μ l	Identification No.	: --
Make	: Super fit XL +	Accuracy	: As per Manual
Working range	: --	Location	: Lab
Details of Standard Used			
Name	Certificate No.	Valid upto	Traceability
Electronic Micro Balance	2023-24/EQN/2306104-64	21-Jun-24	EQN, Chennai.
CP No.	: EQN/CP/MS-03	Reference Standard	: ISO 8655-6
Environmental Details	: Temperature : 25 \pm 2 $^{\circ}$ C	Relative Humidity	: 50 \pm 10 % RH
MECHANICAL CALIBRATION			
(Volume)			
Calibration Results			
1. Lower Volume :	100 μ l	No. of Measurements :	10
<input type="text" value="99.978"/>	<input type="text" value="100.068"/>	<input type="text" value="100.008"/>	<input type="text" value="100.078"/>
<input type="text" value="99.998"/>	<input type="text" value="100.068"/>	<input type="text" value="100.158"/>	<input type="text" value="100.118"/>
<input type="text" value="100.158"/>	<input type="text" value="100.068"/>		
Mean Value :	<input type="text" value="100.070"/> μ l		
Error Limits(\pm)			
Systematic Error :	0.07 μ l	0.80 μ l	
Systematic Error :	0.07 %	0.80 %	
Random Error :	0.06 μ l	0.30 μ l	
Random Error :	0.06 %	0.30 %	
Measurement Uncertainty :	\pm	0.36 μ l	

 Calibrated by : 
 SANGEETHA K P
 (Calibration Engineer)

 Authorised by : 
 V. RAJKARTHICK
 (QM)

CALIBRATION CERTIFICATE

CRF No. : EQN/CRF/2311065 Page 2 of 2
 ULR No. : CC276023000018037F

MECHANICAL CALIBRATION

(Volume)

Calibration Results

2. Middle Volume : 500 μ l No. of Measurements : 10

497.202	497.413	496.840	496.670
496.850	497.142	497.494	496.971
497.192	496.850		

Mean Value : 497.063 μ l

Error Limits(\pm)

Systematic Error :	-2.94	μ l	4.00	μ l
Systematic Error :	-0.59	%	0.80	%

Random Error :	0.27	μ l	1.50	μ l
Random Error :	0.05	%	0.30	%

Measurement Uncertainty : \pm 0.37 μ l

3. Nominal Volume : 1000 μ l No. of Measurements : 10

998.356	998.889	998.487	997.723
998.406	998.648	998.055	998.788
998.266	998.457		

Mean Value : 998.407 μ l

Error Limits(\pm)

Systematic Error :	-1.59	μ l	8.00	μ l
Systematic Error :	-0.16	%	0.80	%

Random Error :	0.34	μ l	3.00	μ l
Random Error :	0.03	%	0.30	%

Measurement Uncertainty : \pm 0.37 μ l

Remarks

1. The reported Expanded Uncertainty is calculated at 95.45 % C.L with coverage factor $k=2$
2. The Above Results are within the maximum permissible Error

End of certificate

Calibrated by :
 SANGEERTH K P
 (Calibration Engineer)



Authorised by:
 V. RAJKARTHICK
 (QM)

CALIBRATION CERTIFICATE

EQN/FT/7.8/01

Page 1 of 1

CRF No.	EQN/CRF/2311116	Date of Calibration	20-Nov-23
Certificate No	2023-24/EQN/2311116-01	Recom. Due Date	19-Nov-24
ULR No.	CC276023000018229F		

Customer Details	Calibrated at
M/s. UPC X - RAY, ECG & Diagnostic Center	Onsite
Meetuplayam Road, Opp NGGO Colony,	Date of Receipt
Vadamadurai (Post),	20-Nov-23
Coimbatore - 641 017	Cond. On Receipt
	Satisfactory
	Date of Issue
	21-Nov-23

DETAILS OF UUC:			
Description	Centrifuge (RPM)	Identification No.	AML-04
Range	1 to 5 Speed Positions	Serial No.	ZCEN - 16010
Least Count	--	Make	REMI
Cal./Working Range	--	Model / Type	C-852
Location	LAB	Accuracy	As Per Manual

DETAILS OF STANDARD USED			
Master Name	Certificate No.	Valid upto	Traceability
Digital Tachometer	INS/MS/07	05-May-24	EQN, Chennai

CP No.	EQN/CP/MS-06
Environmental Details	Temperature: 25±5°C Relative Humidity: 40-70 % RH

Discipline: Mechanical Parameter: RPM

CALIBRATION RESULTS FOR RPM			
Sl. No.	POSITION	STD READING (RPM)	EXPANDED UNCERTAINTY ± (RPM)
1	1	1419	12
2	2	2006	12
3	3	2609	12
4	4	3048	12
5	5	3579	12

Remark :

1. Reading given was the average of 3 Measurements.
2. The reported Expanded Uncertainty is calculated at 95 % C.L Approx with coverage factor $k=2$
3. Due Date as per customer request.

Issued by :	SANGEERTH K P		Authorized by :
Engineer - Calibration			V. RAJKARNICK
			QM