

				ELECTRO METER CORPORATION P- 5, C.I.T ROAD, KOLKATA - 700014		Form No: FM/22 Issue No. 10 and Issue Date: 31-12-2022 CALIBRATION CERTIFICATE OF: AUTO PIPETTE	
CALIBRATION CERTIFICATE NO.: EMC2024-KOL-00036412				ULR NO.: CC214724000030948F		Page: 1/1	
1.0 ISSUED TO:		MKAS HEALTH CARE PVT. LTD. SANJAY HEIGHTS (2ND FLOOR) GADGADIA SQ. NEAR EM. COLLEGE PIN - 756003 ODISHA, INDIA					
1.1 Service Request / Order No.:		45512-L-8					
Description identification of item to be calibrated:							
i Name:		AUTO PIPETTE		ii Code No.:		MKAS/MP-01	
iii Sl. No.:		335438		iv Make:		HIPETTE	
v Model / Type No.:		--		vi Range:		5µl to 50µl	
vii Sensor:		--		viii Resolution:		0.5 µl	
ix Location:		Lab		x Cal. performed:		At lab	
1.3 Applicable specification of item to be calibrated: Accuracy / permissible limit: Not Specified							
1.4 Date of receipt of item:		7-Aug-2024		1.5 Date of calibration:		7-Aug-2024	
1.6 Recommended date for next calibration:		7-Aug-2025		1.7 Report Issue Date:		9-Aug-2024	
1.8a Environmental condition during calibration		Temperature:		21.6 °C			
		Humidity:		55.9 % RH			
		Atmospheric pressure:		1005.6 mbar			
		Water Temperature:		20.4 °C			
1.8b Recommended environmental condition		Temperature:		20°C ± 2°C			
		Humidity:		50% RH ± 10% RH			
1.9 Basis of calibration:		S.O.P Number		S.O.P/MASS/08			
2.0 Standard Equipment Used for Calibration are Traceable to National/International Standards through ISO/IEC: 17025 Accredited Laboratory.							
Sl. No.	Name of the standard instrument used (Sl. No./Code Nos.)	Range	Resolution	Recommended date for next calibration	Certificate Nos.		
1	Weight Box, Make: Mettler Toledo, Grade: E1, Sl. No: B309075500, Code No. EMC/WB-E1/629	1 mg to 200 g	-	20-04-2025	WMCL/E/2022-04/1794		
2	Micro Balance, Make: Mettler Toledo, Model No: XP6, Sl. No. B713878915, Code No. EMC/MB/766	6.1 g	0.000001 g	12-08-2024	EMC2023-KOL-00004502		
3	Digital Temperature & Humidity Meter, Make: Metravi, Model No. HT-3005, Sl. No. 141017143, Code No. EMC/DTHM/769	19°C to 25°C (for Temperature) & 15% RH to 80% RH (for Humidity)	0.1°C (for Temperature) & 0.1% RH (for Humidity)	18-03-2025	EMC2024-KOL-00015947		
4	Digital Temperature Indicator, Make: Metravi, Model No. DTI-111, Sl. No. 503, Code No. EMC/DTI/267	(-)50°C to 199.9°C	0.1°C	27-10-2024	EMC2023-KOL-00006335		
5	Digital Pressure Gauge (Absolute Pressure) Sl. No. D12B151 Model. YDPIR0101, Code No: EMC/APG/574	0 bar to 1.5 bar (Abs)	0.0001 bar	11-10-2024	Wika / WCP/023-686		
Discipline: Mechanical				Group: Volume			
CALIBRATION RESULT							
Nominal Range	Resolution	Nominal Value	Value determined by Electronic Balance in	Actual value determined after temp correction in	Error in	Expanded Uncertainty (±)	k factor
		(µl)	(mg)	(µl)	(µl)	(µl)	
5 µl to 50 µl	0.5 µl	5	5.0990	5.1139	0.1139	0.0032	2.00
		25	24.7510	24.8233	-0.1767	0.0060	2.00
		50	49.6440	49.7891	-0.2109	0.0063	2.00
Note: i) Average of 10 readings had been taken in DUC/STD.							
ii) The calibration certificate is issued by Electro Meter Corporation refers only for the particular item submitted to calibrate.							
iii) Entire certificate should be produced for all purposes. Partial production of an extract of the certificate needs approval from the technical or the quality manager of the lab.							
iv) The results in the calibration certificate are valid at the time and the stated conditions on measurement.							
v) The calibration result is only to be used for scientific & industrial purpose and not for commercial purpose.							
Measurement uncertainty at approx 95 % of confidence level & at a coverage factor : As Per Calibration Result							
Remarks: NA							
DUC- Device Under Calibration		F.S.-Full Scale		Physical status of the DUC: OK			
Calibrated By: Soumyo Kanti Kundu Calibration Engineer				Approved By: Saptarshi Das Technical Manager			
END OF CERTIFICATE							