



CALIBRATION CERTIFICATE

Certificate No. :- 2122/0131/05 -06	Page No. :- 1 of 2
Date of Calibration :- 31-Jan-2022	Calibration Due Date :- 30-Jan-2023
1. Customer Name & Address : Synergen Diagnostics Unit No.105,Sai Chambers, Wakadewadi,Shivajinagar,Pune-411003.	SRF No. :- 2122/0131/05 Date of Received :- 31-Jan-2022 Cal. Cert. Issue Date :- 2-Feb-2022 Condition of UUC :- OK Location of calibration :- In Lab Calibration Procedure No. :- MTS/VM/WI-01

2. Environmental Conditions:	Temperature: 21.2 °C	Relative Humidity: 52 % RH
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3. Description of UUC			
Name :- Micropipette	Range :- 5 to 50 µL		
Make :- ERBA	L.C. :- 0.5 µL		
I.D No. :- SD/PL/NK480222-01	Model/Sr.No. :- /NK480222-01		
Type :- Analog	Location :- BIOCHEMISTRY		

4. Reference Standards used for calibration:			
Name :- Digital Weighing Balance	4- Wire RTD Sensor With Indicator		
Make :- Saffron	Tempsens		
I.D No./Sr. No. :- MTS/WB-04 / M21090500	MTS/TIS-01/867,0042		
Certificate No. :- NI/MTS/011021/001	NI/2106/026/005		
Calibration Validity :- 30-Sep-2022	13-06-2022		
Certified By :- Nishitronics	Nishitronics		
Range/Uncertainty :- As Per Certificate	-30 to 300 Deg C./(+/-) 0.09 Deg C.		

5. Calibration Results							
S. No.	Cal Point		Cal Point		Cal Point		
	5 µl		25 µl		50 µl		
	Mass (mg)	Volume (µl)	Mass (mg)	Volume (µl)	Mass (mg)	Volume (µl)	
1	4.98447	4.99942	24.99910	25.07410	49.71723	49.86638	
2	4.93513	4.94994	25.23316	25.30886	49.82836	49.97785	
3	4.99914	5.01414	24.45786	24.53123	49.74568	49.89492	
4	4.84953	4.86408	24.77653	24.85086	49.61142	49.76025	
5	4.94756	4.96240	24.50514	24.57866	49.91425	50.06399	
6	4.85486	4.86942	24.47896	24.55240	49.61452	49.76336	
7	4.97562	4.99055	24.73458	24.80878	49.86970	50.01931	
8	4.99741	5.01240	25.12360	25.19897	49.92351	50.07328	
9	4.99123	5.00620	25.01350	25.08854	49.71530	49.86445	
10	4.93412	4.94892	25.00315	25.07816	49.87620	50.02583	
Mean	4.94691	4.96175	24.83256	24.90706	49.78162	49.93096	
Standard Devi.	0.055514107	0.055680649	0.282868364	0.289716969	0.117065095	0.117416290	





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S. No.	Cal Point	Accuracy Limit %	Accuracy %
1	5	5.0 %	0.76 %
2	25	0.8 %	0.37 %
3	50	0.8 %	0.14 %

S. No.	Cal Point	% CV Limit	% CV
1	5	2.0 %	1.122 %
2	25	1.5 %	1.139 %
3	50	0.3 %	0.235 %

Z Factor 1.0029 µl/mg Temperature 21.2 Deg C Humidity 52 % RH

Barometric Pressure 944.2 hPa Water Temperature 20.5 Deg C

NOTES:

- 1.The value measured of uuc & standard are mean of 10 reading.
- 2.The reported uncertainty is the expanded uncertainty in measurement obtained by multiplying the standard uncertainty by coverage factor K=2, which corresponds to a coverage probability of approximately 95.45% for normal distribution
- 3.This certificate refers only to the particular UUC submitted for calibration. UUC stands for Unit Under Calibration.
- 4.The calibration results reported in the certificate are valid at the time of and under the stated conditions of measurement.
5. This certificate shall not be reproduced, except in full unless written permission for the publication of an approved abstract has been obtained from "Mastertech Systems" Pune.
- 6.The Instruments used for calibration are traceable to National/International standards and their calibrations are valid.



Calibrated By

P.R.
Ms. Prachita Nighojkar
Calibration Engineer

Approved By

Amol
Mr. Amol Deshmukh
Quality Manager



CC-2294



Nishitronics Instrumentation

► Service Engineers
► Calibration Services in Industrial Process Control
We work for Customers Satisfaction

CALIBRATION CERTIFICATE				
CUSTOMER :- Mastertech Systems	Page No. :- 1 of 2			
Anjali Niketan, Flat No. 3, 2nd Floor, Viveknagar, Akurdi, Pune - 411035	ULR No. :- ULR-CC229421000004660F			
	Discipline :- Mechanical Calibration			
	Certificate No :- NI/MTS/011021/001			
	Date of issue :- 09/10/2021			
	Date of receipt :- 01/10/2021			
	Date of calibration :- 01/10/2021			
Amb. Temp :- 23 ± 5 °C	Cal. Req No. :- NI/MTS/011021/001			
Rh. :- 50 ± 10 % RH	Next Due Date :- 30/09/2022			
Location of calibration :- SITE	Parameter :- MASS			
Characteristic and :- OK	Calibration method no :- NI / CP / M / 02			
Condition of items				
Details of Items				
Name :- Digital Weighing Balance	Range :- upto 60g, upto 220 g			
Make :- SAFFRON	Least Count :- 0.00001 g / 0.0001 g			
Model :- SES 265	Type :- Digital			
ID NO. :- MTS / WB - 04	Accuracy :- Not Specified			
Sr. No. :- M21090500	Location :- --			
Details of Equipment used for Calibration				
Description :- Set of Weight From 1 mg To 200 g				
Sr No / ID. No. :- NI/WE1/01				
Calibrated By :- LCGC Trucal and Services LLP				
Certificate No :- TC/4806/2019				
Validity :- 07/01/2022				
OBSERVATION				
Cal. Point	Mass of Ref. Weight g	UUC Reading g	Correction (Ref mass -UCC Rdg) In g	Expanded Uncertainty In ± g
1 mg	0.0010003	0.00100	0.000000	0.000022
50 mg	0.0500017	0.04998	0.000022	0.000022
100 mg	0.1000005	0.10005	-0.000049	0.000022
1 g	1.0000035	1.00000	0.000004	0.000022
10 g.	10.000013	9.99999	0.000023	0.000022
20 g	19.999997	20.00005	-0.000053	0.000022
50 g	49.999999	49.99996	0.000030	0.000022
100 g	99.999999	99.99999	0.000090	0.000131
220 g	219.99995	220.0001	-0.000153	0.000131
UUC :- Unit Under Calibration				
Repeatability Check (For Max) :				
Cal. Point	Mass of Ref. Weight g	Observation Sr. No.	UUC Reading g	Standard Deviation in g
220 g	219.99995	1	220.0001	0.000099
		2	220.0001	
		3	219.9999	
		4	220.0001	
		5	219.9999	
		6	220.0000	
		7	220.0001	
		8	219.9999	
		9	220.0001	
		10	219.9999	

