

Calibration Laboratory







## **CALIBRATION CERTIFICATE**

Customer Name & Address	Certificate No.	: MTPL/23/1633/4
a ser and the series of	Equipment Received On	: 23/08/2023
EMPLOYE'S STATE INSURANCE	Equipment Condition	: Satisfactory
CORPORATION SUPER SPECIALITY	Date of Calibration	: 24/08/2023
HOSPITAL, Sanathnagar, Hyderabad 500038.	Recommended Calibration Due	: 23/08/2024
The second secon	Date of issue	: 25/08/2023
MECHANICAL DISCIPLINE (VOLUME)	ULR No.	: CC219123000018002F

### Details of Unit Under Calibration:

Instrument Specification	: Micro Pipette		
Make	: Eppendorf		
Model	1	Range	: 0.5 to 10 μl
Sr. No	: 197839Z	Resolution	: 0.01 μl
Id. No.	: ESICSSH/MICRO/E913	Unit Under Measurement	: µl

## Standard used for calibration:

Instrument Name	Instrument Sr. No. / Id No.	Certificate No.	Calibration Due On	Traceability with NABL Lab No.
Micro Balance	METSAR-M-001	MTPL/23/0156/1	26/01/2024	CC-2191

Environmen	tal Conditions	SOP Number
Temperature	Humidity	MTPL/CL/SOP/MV/03
$23 \pm 1^{\circ}$ C	40 to 60 %RH	MTPL/CL/SOP/MV/03

#### Results of Calibration:

Sr. No.	Set Volume in µl	Standard Balance Reading in g	Actual Calculated Volume in µl @ 27 °C	Error	Expanded Uncertainty
1	1.00	0.001012	1.010	0.010	0.1
2	3.00	0.003030	3.020	0.020	0.1
3	5.00	0.005040	5.029	0.029	0.1
4	7.00	0.008058	7.037	0.037	0.1
5	10.00	0.010072	10.045	0.045	0.1

## Repeatability Results @ 27 °C:

Sr. No.	Set Volume In µl	The sale of	Acti	ıal Calculated Vol In µl	lume	Page Street
1	10.00	10.015	10.029	10.069	10.047	10.069
* 1	10.00	10.060	10.014	10.048	10.035	10.062

## Remarks:

- a) The Standard used for calibration is traceable to National/International standards through unbroken chain of Accredited Laboratories.
- b) Reference Standard and Method used: ISO 8655-6, Gravimetric Method.
- c) The result stated in this calibration certificate is related only to the item submitted for calibration.
- d) UUC means Unit Under Calibration.
- e) The reported expanded uncertainty of measurement is stated at a confidence level of approximately 95.45% with coverage factor k=2.
- f) Certificate shall not be reproduced except in full without the written approval of the laboratory.
- g) The instrument was calibrated at Mass and Volume Lab-1.
- h) The Recommended Due Date of this calibration certificate is given as per request of customer.

Ch. Novesh.

CH. Naresh

Sr. Calibration Engineer

MTPL/CL/FF/CC/ME/MP

Certificate Approved By
M. Ramratan
Technical Manager

\*\* End of Calibration Certificate\*\*

METSAR TECHNOLOGIES PVT. LTD.

An ISO 9001-2015 Certified Company



Calibration Laboratory





## CALIBRATION CERTIFICATE

Customer Name & Address	Certificate No.	: MTPL/23/1905/8
	Equipment Received On	: 29/09/2023
EMPLOYE'S STATE INSURANCE	<b>Equipment Condition</b>	: Satisfactory
CORPORATION SUPER SPECIALITY	Date of Calibration	: 30/09/2023
HOSPITAL, Sanathnagar, Hyderabad – 500038.	Recommended Calibration Due	: 29/09/2024
A STATE OF THE PARTY OF THE PAR	Date of issue	: 03/10/2023
MECHANICAL DISCIPLINE (VOLUME)	ULR No.	: CC219123000018760F

Details of Unit Under Calibration:

Instrument Specification : Micro Pipette

Make : Eppendorf

Model : Research plus Range : 10 to 100 µ

Sr. No : 199428Z Resolution : 1 μl
Id. No. : ESICSSH/MICRO/EQ14 Unit Under Measurement : g

Standard used for calibration:

Instrument Name	Instrument Sr. No. / Id No.	Certificate No.	Calibration Due On	Traceability with NABL Lab No.
Semi Micro Balance	METSAR-M-002	MTPL/23/0156/2	26/01/2024	CC-2191
Micro Balance	METSAR-M-001	MTPL/23/0156/1	26/01/2024	CC-2191

Environmen	tal Conditions	SOP Number
Temperature Humidity		MTDL/CL/COD/MV/02
$23 \pm 1^{0}$ C	40 to 60 %RH	MTPL/CL/SOP/MV/03

#### Results of Calibration:

Sr. No.	Set Volume in µl	Standard Balance Reading in g	Actual Calculated Volume in µl @ 27 °C	Error ( <u>+</u> ) in μl	Expanded Uncertainty
1	10	0.010012	9.994	0.006	0.1
2	30	0.03023	30.18	0.18	1.2
3	60	0.06033	60.21	0.21	1.2
4	80	0.08038	80.23	0.23	1.2
5	100	0.10044	100.26	0.26	1.2

Repeatability Results @ 27 °C:

Sr. No.	Set Volume In µl		Actu	ıal <mark>Calculated</mark> Vo In μl	lume	A TLA
1	100	100.30	100.27	100.25	100.28	100.24
1 100	100	100.23	100.26	100.39	100.28	100.27

## Remarks:

- The Standard used for calibration is traceable to National/International standards through unbroken chain of Accredited Laboratories.
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- d) UUC means Unit Under Calibration.
- e) The reported expanded uncertainty of measurement is stated at a confidence level of approximately 95.45% with coverage factor k=2.
- f) Certificate shall not be reproduced except in full without the written approval of the laboratory.
- g) The instrument was calibrated at Mass and Volume Lab.
- h) The Recommended Due Date of this calibration certificate is given as per request of customer.

Calibrated By G. Satya Swetha Calibration Engineer Certificate Approved By
N. Chanakya
Sr. Manager Calibration

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Calibration Laboratory







Customer Name & Address	Certificate No.	: MTPL/23/1633/2
A TOTAL SECTION OF THE SECTION OF TH	Equipment Received On	: 23/08/2023
EMPLOYE'S STATE INSURANCE CORPORATION SUPER SPECIALITY	Equipment Condition	: Satisfactory
HOSPITAL,	Date of Calibration	: 24/08/2023
Sanathnagar, Hyderabad – 500038.	Recommended Calibration Due	: 23/08/2024
The same of the sa	Date of issue	: 25/08/2023
MECHANICAL DISCIPLINE (VOLUME)	III D No	. CC210122000018000E

**Details of Unit Under Calibration:** 

Instrument Specification : Micro Pipette

Make

: Eppendorf

Model

- FF

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Range

: 100to 1000 ul

Sr. No

: 233693Z

Resolution

: 1 µl

Id. No.

: ESICSSH/MICRO/EQ15

Unit Under Measurement

: u1

Standard used for calibration:

Instrument Name	Instrument Sr. No. / Id No.	Certificate No.	Calibration Due On	Traceability with NABL Lab No.
Semi Micro Balance	METSAR-M-002	MTPL/23/0156/2	26/01/2024	CC-2191

### Results of Calibration:

Sr. No.	Set Volume in µl	Standard Balance Reading in g	Actual Calculated Volume in μl @ 27 °C	Error (±) in µl	Expanded Uncertainty (±) in μl
1	100	0.10000	99.87	0.13	1.2
2	300	0.30043 -	299.80	0.20	15
3	500	0.50079	499.71	0.29	15
4	800	0.80132	799.63	0.37	15
5	1000	1.00143	999.44	0.56	15

Repeatability Results @ 27 °C

Sr. No.	Set Volume In µl	No. of	Act	ual Calculated Vo In µl	lume	20 20
1		999.42	999.12	999.05	999.50	999.95
1 1000	999.26	999.76	999.78	998.77	999 80	

#### Remarks:

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- h) The Recommended Due Date of this calibration certificate is given as per request of customer.

Ch. Naresh.
Calibrated By

CH. Naresh

Sr. Calibration Engineer

Certificate Approved By
M. Ramratan
Technical Manager

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Calibration Laboratory

## **CALIBRATION CERTIFICATE**





Customer Name & Address	Certificate No.	: MTPL/23/1633/1
	Equipment Received On	: 23/08/2023
EMPLOYE'S STATE INSURANCE	Equipment Condition	: Satisfactory
CORPORATION SUPER SPECIALITY HOSPITAL,	Date of Calibration	: 24/08/2023
Sanathnagar, Hyderabad – 500038.	Recommended Calibration Due	: 23/08/2024
	Date of issue	: 25/08/2023
MECHANICAL DISCIPLINE (VOLUME)	ULR No.	: CC219123000018007F

Details of Unit Under Calibration:

Instrument Specification : Micro Pipette

Make : Eppendorf

Model :--- Range : 500 to 5000 μl

Sr. No : 498552Z Resolution : 5 μl

Id. No. : ESICSSH/MICRO/EQ16 Unit Under Measurement : μl

Standard used for calibration:

Instrument Name

Instrument Sr. No. / Id No.

Semi Micro Balance

Instrument Sr. No. / Id No.

METSAR-M-002

MTPL/23/0156/2

Calibration Due Traceability with NABL Lab No.

NABL Lab No.

CC-2191

Environmental ConditionsSOP NumberTemperatureHumidityMTPL/CL/SOP/MV/03 $23 \pm 1^{0}$ C40 to 60 %RH

### Results of Calibration:

Sr. No.	Set Volume in µl	Standard Balance Reading in g	Actual Calculated Volume in μl @ 27 °C	Error (±) in µl	Expanded Uncertainty (±) in μl
1	500	0.50125	500.21	0.21	15
2	2000	2.00375	1999.67	0.33	15
3	3000	3.00655	3000.53	0.53	15
4	4000	4.00846	4000.35	0.35	15
5	5000	5.00954	4999.88	0.12	15

Repeatability Results @ 27 °C

Sr. No.	Set Volume In µl	Actual Calculated Volume In μl				
1		4999.86	4999.88	4999.91	4999.89	4999.90
1	5000	4999.92	4999.87	4999.83	4999.86	4999.87

#### Remarks:

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- g) The instrument was calibrated at Mass and Volume Lab-1.
- h) The Recommended Due Date of this calibration certificate is given as per request of customer.

Calibrated By
G. Praveen
Calibration Engineer

Certificate Approved By M. Ramratan Technical Manager

\*\* End of Calibration Certificate\*\*
METSAR TECHNOLOGIES PVT. LTD

MTPL/CL/FF/CC/ME/MP

An ISO 9001-2015 Certified Company



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## CALIBRATION CERTIFICATE

Customer Name & Address	Certificate No.	: MTPL/23/1633/5
APLEASE LA SE LA SE	Equipment Received On	: 23/08/2023
EMPLOYE'S STATE INSURANCE	Equipment Condition	: Satisfactory
CORPORATION SUPER SPECIALITY HOSPITAL,	Date of Calibration	: 24/08/2023
Sanathnagar, Hyderabad – 500038.	Recommended Calibration Due	: 23/08/2024
Control of the second	Date of issue	: 25/08/2023
MECHANICAL DISCIPLINE (VOLUME)	ULR No.	: CC219123000018003F

Details of Unit Under Calibration:

**Instrument Specification** : Micro Pipette

Make : Eppendorf

Model Sr. No : 196645Z

: ESICSS/MICRO/EQ17

Range Resolution : 20 to 200 i

: 0.2 µl

Unit Under Measurement : µl

Standard used for calibration:

Id. No.

Instrument Name	Instrument Sr. No. / Id No.	Certificate No.	Calibration Due On	Traceability with NABL Lab No.
Semi Micro Balance	METSAR-M-002	MTPL/23/0156/2	26/01/2024	CC-2191

Environmental Conditions		SOP Number
Temperature	Humidity	MTDI /CI /COD/MY/02
$23 \pm 1^{\circ}$ C	40 to 60 %RH	MTPL/CL/SOP/MV/03

## Results of Calibration:

Sr. No.	Set Volume in µl	Standard Balance Reading in g	Actual Calculated Volume in µl @ 27 °C	Error	Expanded Uncertainty (±) in µl
1	20.0	0.02014	20.11	0.11	1.2
2	50.0	0.05031	50.22	0.22	1.2
3	100.0	0.10058	100.38	0.38	1.2
4	150.0	0.15078	150.49	0.49	15
5	200.0	0.20093	200.55	0.55	15

Repeatability Results @ 27 °C:

Sr. No.	Set Volume In µl	40	Acti	ı <mark>al Calculated V</mark> ol In µl	lume	-A 16
1	200.0	200.48	200.56	200.67	200.60	200.49
1 200.0	200.41	200.44	200.72	200.66	200.50	

### Remarks:

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- Certificate shall not be reproduced except in full without the written approval of the laboratory.
- The instrument was calibrated at Mass and Volume Lab-1.
- The Recommended Due Date of this calibration certificate is given as per request of customer.

ch. Narest Calibrated By

CH. Naresh Sr. Calibration Engineer

M. Ramratan Technical Manager



Calibration Laboratory







## **CALIBRATION CERTIFICATE**

Customer Name & Address	Certificate No.	: MTPL/23/1905/7
C 40 TO THE THE THE THE	Equipment Received On	: 29/09/2023
EMPLOYE'S STATE INSURANCE	Equipment Condition	: Satisfactory
CORPORATION SUPER SPECIALITY	Date of Calibration	: 30/09/2023
HOSPITAL, Sanathnagar, Hyderabad – 500038.	Recommended Calibration Due	: 29/09/2024
	Date of issue	: 03/10/2023
MECHANICAL DISCIPLINE (VOLUME)	ULR No.	: CC219123000018759F

### **Details of Unit Under Calibration:**

Instrument Specification : Micro Pipette

Make : P'fact

Model :---

Id. No. : ESICSSH/MICRO/EQ26

: 01520761

Range

: 0.5 to 10 μl

Resolution : 0.1 µl

Unit Under Measurement : g

#### Standard used for calibration:

Sr. No

Instrument Name	Instrument Sr. No. / Id No.	Certificate No.	Calibration Due On	Traceability with NABL Lab No.
Micro Balance	METSAR-M-001	MTPL/23/0156/1	26/01/2024	CC-2191

Environmen	tal Conditions	SOP Number
Temperature	Humidity	MTDL/CL/SOD/MV/02
$23 \pm 1$ ${}^{0}C$	40 to 60 % RH	MTPL/CL/SOP/MV/03

## Results of Calibration:

Sr. No.	Set Volume in µl	Standard Balance Reading in g	Actual Calculated Volume in µl @ 27 °C	Error (±) in μl	Expanded Uncertainty (±) in μl
1	1.0	0.001008	1.005	0.005	0.1
2	3.0	0.003020	3.012	0.012	0.1
3	5.0	0.005032	5.017	0.017	0.1
4	8.0	0.008050	8.024	0.024	0.1
5	10.0	0.010065	10.033	0.033	0.1

Repeatability Results @ 27 °C:

Sr. No.	Set Volume In µl	a way bet	Actu	ıal Cal <mark>cula</mark> ted Volu In µl	me	100
1	10.0	10.033	10.032	10.031	10.036	10.035
1	10.0	10.030	10.031	10.035	10.037	10.029

#### Remarks:

- The Standard used for calibration is traceable to National/International standards through unbroken chain of Accredited Laboratories.
- b) Reference Standard and Method used: ISO 8655-6, Gravimetric Method.
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- f) Certificate shall not be reproduced except in full without the written approval of the laboratory.
- g) The instrument was calibrated at Mass and Volume Lab.
- h) The Recommended Due Date of this calibration certificate is given as per request of customer.

Calibrated By G. Satya Swetha

Calibration Engineer

Certificate Approved By
N. Chanakya
Sr. Manager Calibration

\*\*End of Calibration Certificate\*\*

METSAR TECHNOLOGIES PVT. LTD.



Calibration Laboratory







## CALIBRATION CERTIFICATE

Customer Name & Address	Certificate No.	: MTPL/23/1905/6
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EMPLOYE'S STATE INSURANCE	Equipment Condition	: Satisfactory
CORPORATION SUPER SPECIALITY	Date of Calibration	: 30/09/2023
HOSPITAL, Sanathnagar, Hyderabad – 500038.	Recommended Calibration Due	: 29/09/2024
The second secon	Date of issue	: 03/10/2023
MECHANICAL DISCIPLINE (VOLUME)	ULR No.	: CC219123000018758F

## Details of Unit Under Calibration:

**Instrument Specification** : Micro Pipette

Make : P'fact

Sr. No

Id. No.

Model

: 01520717

: ESICSSH/MICRO/EQ27

Range

Resolution

: 0.5 to 10 ul : 0.1 ul

Unit Under Measurement

Standard used for calibration:

Instrument Name	Instrument Sr. No. / Id No.	Certificate No.	Calibration Due On	Traceability with NABL Lab No.
Micro Balance	METSAR-M-001	MTPL/23/0156/1	26/01/2024	CC-2191

Environ	mental Conditions	SOP Number
Temperature	Humidity	MTDI GU GODA MUO
$23 \pm 1$ $^{0}$ C	40 to 60 % RH	MTPL/CL/SOP/MV/03

## Results of Calibration:

Sr. No.	Set Volume in µl	Standard Balance Reading in g	Actual Calculated Volume in µl @ 27 °C	Error (±) in µl	Expanded Uncertainty (±) in µl
1	1.0	0.001010	1.008	0.008	0.1
2	3.0	0.003023	3.015	0.015	0.1
3	5.0	0.005036 *	5.020	0.020	0.1
4	8.0	0.008057 -	8.035	0.035	0.1
5	10.0	0.010084	10.054	0.054	0.1

Repeatability Results @ 27 °C:

Sr. No.	Set Volume In µl	Actual Calculated Volume In μl				
1	10.0	10.055	10.052	10.054	10.053	10.059
1 10.0	10.057	10.051	10.057	10.053	10.050	

### Remarks:

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- UUC means Unit Under Calibration.
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- Certificate shall not be reproduced except in full without the written approval of the laboratory.
- The instrument was calibrated at Mass and Volume Lab.
- The Recommended Due Date of this calibration certificate is given as per request of customer

Calibrated By G. Satya Swetha

Calibration Engineer

Certificate Approved By N. Chanakya

Sr. Manager Calibration



Calibration Laboratory







Customer Name & Address	Certificate No.	: MTPL/23/1905/5
N CONTRACTOR CONTRACTOR	Equipment Received On	: 29/09/2023
EMPLOYE'S STATE INSURANCE	Equipment Condition	: Satisfactory
CORPORATION SUPER SPECIALITY	Date of Calibration	: 30/09/2023
HOSPITAL, Sanathnagar, Hyderabad – 500038.	Recommended Calibration Due	: 29/09/2024
THE RESERVE THE PARTY OF THE PA	Date of issue	: 03/10/2023
MECHANICAL DISCIPLINE (VOLUME)	III.R No	· CC219123000018757F

**Details of Unit Under Calibration:** 

Instrument Specification : Micro Pipette

Make

Model :--

Sr. No : 01520844

Id. No. : ESICSSH/MICRO/EQ28

: P'fact

Range

Resolution :

Unit Under Measurement

: 2 to 20 μl : 0.1 μl

: 0.1 µ1

Standard used for calibration:

Instrument Name

Instrument Name

Sr. No. / Id No.

Micro Balance

METSAR-M-001

MTPL/23/0156/1

Certificate No.

MTPL/23/0156/1

Calibration Due

On

NABL Lab No.

26/01/2024

CC-2191

Environmental Conditions
Temperature Humidity

 $23 \pm 1$  °C 40 to 60 % RH

SOP Number

MTPL/CL/SOP/MV/03

#### Results of Calibration:

Sr. No.	Set Volume in µl	Standard Balance Reading in g	Actual Calculated Volume in µl @ 27 °C	Error (±) in µl	Expanded Uncertainty (±) in µl
1	2.0	0.002014	2.009	0.009	0.1
2	5.0	0.005026	5.013	0.013	0.1
3	10.0	0.010045	10.019	0.019	0.1
4	15.0	0.015064	15.024	0.024	1.2
5	20.0	0.020085	20.029	0.029	1.2

Repeatability Results @ 27 °C:

Sr. No.	Set Volume In µl	Actual Calculated Volume In μl				
1	20.0	20.030	20.026	20.031	20.030	20.027
1 20.0	20.025	20.028	20.030	20.032	20.026	

#### Remarks:

- The Standard used for calibration is traceable to National/International standards through unbroken chain of Accredited Laboratories.
- Reference Standard and Method used: ISO 8655-6, Gravimetric Method.
- c) The result stated in this calibration certificate is related only to the item submitted for calibration.
- d) UUC means Unit Under Calibration.
- e) The reported expanded uncertainty of measurement is stated at a confidence level of approximately 95.45% with coverage factor k=2.
- f) Certificate shall not be reproduced except in full without the written approval of the laboratory.
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- The Recommended Due Date of this calibration certificate is given as per request of customer.

Calibrated By

G. Satya Swetha
Calibration Engineer

Certificate Approved By N. Chanakya Sr. Manager Calibration

\*\*End of Calibration Certificate\*\*

METSAR TECHNOLOGIES PVT. LTD.



Calibration Laboratory







## **CALIBRATION CERTIFICATE**

Customer Name & Address	Certificate No.	: MTPL/23/1905/4
to the same of the	Equipment Received On	: 29/09/2023
EMPLOYE'S STATE INSURANCE	Equipment Condition	: Satisfactory
CORPORATION SUPER SPECIALITY	Date of Calibration	: 30/09/2023
HOSPITAL, Sanathnagar, Hyderabad – 500038.	Recommended Calibration Due	: 29/09/2024
The same of the sa	Date of issue	: 03/10/2023
MECHANICAL DISCIPLINE (VOLUME)	ULR No.	: CC219123000018756F

## Details of Unit Under Calibration:

**Instrument Specification** : Micro Pipette Make : P'fact Model : 2 to 20 ul Range Sr. No : 01520829 Resolution : 0.1 µl Id. No. **Unit Under Measurement** 

#### Standard used for calibration:

Instrument Name	Instrument Sr. No. / Id No.	Certificate No.	Calibration Due On	Traceability with NABL Lab No.
Micro Balance	METSAR-M-001	MTPL/23/0156/1	26/01/2024	CC-2191

Environmen	tal Conditions	SOP Number
Temperature	Humidity	MTDL/CL/COD/MV/02
$23 \pm 1$ °C	40 to 60 % RH	MTPL/CL/SOP/MV/03

#### Results of Calibration:

Sr. No.	Set Volume in µl	Standard Balance Reading in g	Actual Calculated Volume in µl @ 27 °C	Error (±) in µl	Expanded Uncertainty (±) in µl
1	2.0	0.002019	2.014	0.014	0.1
2	5.0	0.005031	5.017	0.017	0.1
3	10.0	0.010054	10.028	0.028	0.1
4	15.0	0.015072	15.033	0.033	1.2
5	20.0	0.020095	20.040	0.040	1.2

## Repeatability Results @ 27 °C

Sr. No.	Set Volume In µl	A MARKET	Actu	ıal Ca <mark>lcul</mark> ated Vo In µl	lume	En St
1	20.0	20.042	20.038	20.043	20.042	20.039
1	20.0	20.037	20.040	20.042	20.038	20.044

#### Remarks:

- The Standard used for calibration is traceable to National/International standards through unbroken chain of Accredited Laboratories.
- Reference Standard and Method used: ISO 8655-6, Gravimetric Method.
- The result stated in this calibration certificate is related only to the item submitted for calibration.
- UUC means Unit Under Calibration.
- The reported expanded uncertainty of measurement is stated at a confidence level of approximately 95.45% with coverage factor k=2.
- Certificate shall not be reproduced except in full without the written approval of the laboratory.
- The instrument was calibrated at Mass and Volume Lab.
- The Recommended Due Date of this calibration certificate is given as per request of customer

Calibrated By G. Satya Swetha

Calibration Engineer

Certificate Approved By N. Chanakya Sr. Manager Calibration

R TECHNOLOGIES PVT. LTD.



Calibration Laboratory



: 20 to 200 p



## **CALIBRATION CERTIFICATE**

Customer Name & Address	Certificate No.	: MTPL/23/1905/1
A TO A SALE OF THE	Equipment Received On	: 29/09/2023
EMPLOYE'S STATE INSURANCE	Equipment Condition	: Satisfactory
CORPORATION SUPER SPECIALITY	Date of Calibration	: 30/09/2023
HOSPITAL, Sanathnagar, Hyderabad – 500038.	Recommended Calibration Due	: 29/09/2024
The same of the sa	Date of issue	: 03/10/2023
MECHANICAL DISCIPLINE (VOLUME)	ULR No.	: CC219123000018753F

**Details of Unit Under Calibration:** 

Instrument Specification : Micro Pipette

Make : P'fact

Model : ---

: PF552699 Resolution : 1 µl

Range

Id. No. : ESICSSH/MICRO/EQ30 Unit Under Measurement : g

Standard used for calibration:

Sr. No

Instrument Name	Instrument Sr. No. / Id No.	Certificate No.	Calibration Due On	Traceability with NABL Lab No.
Semi Micro Balance	METSAR-M-002	MTPL/23/0156/2	26/01/2024	CC-2191
Micro Balance	METSAR-M-001	MTPL/23/0156/1	26/01/2024	CC-2191

Environmen	tal Conditions	SOP Number
Temperature	Humidity	MTPL/CL/SOP/MV/03
$23 \pm 1^{\circ}$ C	40 to 60 %RH	MTPL/CL/SOP/MV/03

## Results of Calibration:

Sr. No.	Set Volume in µl	Standard Balance Reading in g	Actual Calculated Volume in μl @ 27 °C	Error ( <u>+</u> ) in μl	Expanded Uncertainty (±) in μl
1	20	0.020017	19.977	0.023	1.2
2	50	0.05023	50.13	0.13	1.2
3	100	0.10042	100.21	0.21	1.2
4	150	0.15055	150.24	0.24	15
5	200	0.20069	200.32	0.32	15

Repeatability Results @ 27 °C:

Sr. No.	Set Volume In µl	of and	Actu	ıal Calculated Vo In μl	lume	
1	200	200.33	200.37	200.32	200.31	200.30
1	200	200.32	200.29	200.32	200.27	200.32

#### Remarks:

- The Standard used for calibration is traceable to National/International standards through unbroken chain of Accredited Laboratories.
- b) Reference Standard and Method used: ISO 8655-6, Gravimetric Method.
- c) The result stated in this calibration certificate is related only to the item submitted for calibration.
- d) UUC means Unit Under Calibration.
- e) The reported expanded uncertainty of measurement is stated at a confidence level of approximately 95.45% with coverage factor k=2.
- f) Certificate shall not be reproduced except in full without the written approval of the laboratory.
- g) The instrument was calibrated at Mass and Volume Lab.
- h) The Recommended Due Date of this calibration certificate is given as per request of customer.

Calibrated By
G. Satya Swetha
Calibration Engineer

Certificate Approved By N. Chanakya Sr. Manager Calibration

METS End of Calibration Certificates



Calibration Laboratory





## CALIBRATION CERTIFICATE

Customer Name & Address	Certificate No.	: MTPL/23/1905/3
A TO THE REAL PROPERTY AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF TH	Equipment Received On	: 29/09/2023
EMPLOYE'S STATE INSURANCE	Equipment Condition	: Satisfactory
CORPORATION SUPER SPECIALITY	Date of Calibration	: 30/09/2023
HOSPITAL, Sanathnagar, Hyderabad – 500038.	Recommended Calibration Due	: 29/09/2024
	Date of issue	: 03/10/2023
MECHANICAL DISCIPLINE (VOLUME)	ULR No.	: CC219123000018755F

#### **Details of Unit Under Calibration:**

Instrument Specification : Micro Pipette

Make : P'fact

Time Time

Model :--- Range : 20 to 200 μ

Sr. No : PF552683 Resolution : 1 μl

Id. No. : ESICSSH/MICRO/EQ31 Unit Under Measurement : g

Standard used for calibration:

Instrument Name	Instrument Sr. No. / Id No.	Certificate No.	Calibration Due On	Traceability with NABL Lab No.
Semi Micro Balance	METSAR-M-002	MTPL/23/0156/2	26/01/2024	CC-2191
Micro Balance	METSAR-M-001	MTPL/23/0156/1	26/01/2024	CC-2191

Environmen	tal Conditions	SOP Number	
Temperature	Humidity	MTDL/CL/CODAGY/02	
$23 \pm 1^{\circ}$ C	40 to 60 %RH	MTPL/CL/SOP/MV/03	

## Results of Calibration:

Sr. No.	Set Volume in µl	Standard Balance Reading in g	Actual Calculated Volume in μl @ 27 °C	Error ( <u>+</u> ) in µl	Expanded Uncertainty ( ± ) in µl
1	20	0.020023	19.985	0.015	1.2
2	50	0.05024	50.12	0.12	1.2
3	100	0.10041	100.20	0.20	1.2
4	150	0.15056	150.27	0.27	15
5	200	0.20075	200.38	0.38	15

#### Repeatability Results @ 27 °C:

Sr. No.	Set Volume In µl	AL THE	Actu	ıal Calculated Vol In μl	lume	A TAY
, ,	200	200.43	200.39	200.36	200.37	200.42
1	200	200.40	200.36	200.41	200.38	200.37

#### Remarks:

- The Standard used for calibration is traceable to National/International standards through unbroken chain of Accredited Laboratories.
- b) Reference Standard and Method used: ISO 8655-6, Gravimetric Method.
- c) The result stated in this calibration certificate is related only to the item submitted for calibration.
- d) UUC means Unit Under Calibration.
- e) The reported expanded uncertainty of measurement is stated at a confidence level of approximately 95.45% with coverage factor k=2.
- f) Certificate shall not be reproduced except in full without the written approval of the laboratory.
- g) The instrument was calibrated at Mass and Volume Lab.
- The Recommended Due Date of this calibration certificate is given as per request of customer.

Calibrated By G. Satya Swetha Calibration Engineer

Certificate Approved By N. Chanakya Sr. Manager Calibration

METSABING Chibbación Centicia (\*\*



Calibration Laboratory





# CALIBRATION CERTIFICATE

Customer Name & Address	Certificate No.	: MTPL/23/1633/8
A	Equipment Received On	: 23/08/2023
EMPLOYE'S STATE INSURANCE	Equipment Condition	: Satisfactory
CORPORATION SUPER SPECIALITY	Date of Calibration	: 24/08/2023
HOSPITAL, Sanathnagar, Hyderabad 500038.	Recommended Calibration Due	: 23/08/2024
	Date of issue	: 25/08/2023
MECHANICAL DISCIPLINE (VOLUME)	ULR No.	: CC219123000018006F

**Details of Unit Under Calibration:** 

 Instrument Specification
 : Micro Pipette

 Make
 : Eppendorf

 Model
 : -- Range
 : 0.1 to 2.5 μl

 Sr. No
 : G41060J
 Resolution
 : 0.002 μl

 Id. No.
 : -- Unit Under Measurement
 : μl

Standard used for calibration:

Instrument Name	Instrument Sr. No. / Id No.	Certificate No.	Calibration Due On	Traceability with NABL Lab No.
Micro Balance	METSAR-M-001	MTPL/23/0156/1	26/01/2024	CC-2191

Environmen	tal Conditions	SOP Number	
Temperature	Humidity	MTDL/CL/CODA (1//02	
$23 \pm 1^{\circ}$ C	40 to 60 %RH	MTPL/CL/SOP/MV/03	

## Results of Calibration:

Sr. No.	Set Volume in μl	Standard Balance Reading in g	Actual Calculated Volume in µl @ 27 °C	Error ( <u>+</u> ) in μl	Expanded Uncertainty
1	1.000	0.001026	1.023	0.023	0.1
2	1.500	0.001526	1.524	0.024	1.0
3	2.000	0.002043	2.039	0.039	0.1
4	2.500	0.002527	2.520	0.020	0.1

Repeatability Results @ 27 °C:

Sr. No.	Set Volume In µl		Acti	ıal Calculated Vol In µl	lume	A SA
1	2.5	2.518	2.522	2.521	2.520	2.517
1	2.3	2.520	2.518	2.519	2.516	2.523

## Remarks:

- a) The Standard used for calibration is traceable to National/International standards through unbroken chain of Accredited Laboratories.
- b) Reference Standard and Method used: ISO 8655-6, Gravimetric Method.
- c) The result stated in this calibration certificate is related only to the item submitted for calibration.
- d) UUC means Unit Under Calibration.
- e) The reported expanded uncertainty of measurement is stated at a confidence level of approximately 95.45% with coverage factor k=2.
- f) Certificate shall not be reproduced except in full without the written approval of the laboratory.
- g) The instrument was calibrated at Mass and Volume Lab-1.
- h) The Recommended Due Date of this calibration certificate is given as per request of customer.

ch. Novesh

Calibrated By CH. Naresh

Sr. Calibration Engineer

Certificate Approved By M. Ramratan Technical Manger

\*\* End of Calibration Certificate\*\*

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An ISO 9001-2015 Certified Company



Calibration Laboratory







Customer Name & Address	Certificate No.	: MTPL/23/1633/7
A Sec. of the last of the last	Equipment Received On	: 23/08/2023
EMPLOYE'S STATE INSURANCE	Equipment Condition	: Satisfactory
CORPORATION SUPER SPECIALITY	Date of Calibration	: 24/08/2023
HOSPITAL, Sanathnagar, Hyderabad 500038.	Recommended Calibration Due	: 23/08/2024
	Date of issue	: 25/08/2023
MECHANICAL DISCIPLINE (VOLUME)	III P No	· CC210122000019005E

**Details of Unit Under Calibration:** 

Instrument Specification
Make
: Micro Pipette
: Eppendorf

 Model
 : -- Range
 : 0.1 to 2.5 μl

 Sr. No
 : Q11143I
 Resolution
 : 0.002 μl

 Id. No.
 : -- Unit Under Measurement
 : μl

Standard used for calibration:

Instrument Name	Instrument Sr. No. / Id No.	Certificate No.	Calibration Due On	Traceability with NABL Lab No.
Micro Balance	METSAR-M-001	MTPL/23/0156/1	26/01/2024	CC-2191

Environmen	tal Conditions	SOP Number	_
Temperature	Humidity	MTPL/CL/SOP/MV/03	
$23 \pm 1^{\circ}$ C	40 to 60 %RH	MTPL/CL/SOP/MV/03	

## Results of Calibration:

Sr. No.	Set Volume in µl	Standard Balance Reading in g	Actual Calculated Volume in µl @ 27 °C	Error ( <u>+</u> ) in µl	Expanded Uncertainty (±) in µl
1	1.000	0.001025	1.023	0.023	0.1
2	1.500	0.001521	1.518	0.018	0.1
3	2.000	0.002013	2.008	0.008	0.1
4	2.500	0.002516	2.509	0.009	0.1

#### Repeatability Results @ 27 °C:

Sr. No.	Set Volume In µl	j in the second	Acti	ıal Calculated Vol In µl	lume	100
1	2.5	2.501	2.508	2.505	2.504	2.502
1	2.3	2.507	2.503	2.506	2.507	2.510

#### Remarks:

- The Standard used for calibration is traceable to National/International standards through unbroken chain of Accredited Laboratories.
- b) Reference Standard and Method used: ISO 8655-6, Gravimetric Method.
- c) The result stated in this calibration certificate is related only to the item submitted for calibration.
- d) UUC means Unit Under Calibration.
- e) The reported expanded uncertainty of measurement is stated at a confidence level of approximately 95.45% with coverage factor k=2.
- f) Certificate shall not be reproduced except in full without the written approval of the laboratory.
- g) The instrument was calibrated at Mass and Volume Lab-1.
- h) The Recommended Due Date of this calibration certificate is given as per request of customer.

ch. Naresh.

CH. Naresh
Sr. Calibration Engineer

Certificate Approved By
M. Ramratan
Technical Manager

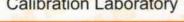
\*\* End of Calibration Certificate\*\*

MTPL/CL/FF/CC/ME/MP

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Calibration Laboratory







## CÂLIBRATION CERTIFICATE

Customer Name & Address	Certificate No.
EMPLOYE'S STATE INSURANCE CORPORATION SUPER SPECIALITY HOSPITAL, Sanathnagar, Hyderabad – 500038.	Equipment Received Equipment Condition Date of Calibration Recommended Calib

MECHANICAL DISCIPLINE (VOLUME)

Certificate No. : MTPL/23/1957/5

d On : 06/10/2023 : Satisfactory

: 07/10/2023

bration Due : 06/10/2024 Date of issue : 10/10/2023

ULR No. : CC219123000019208F

**Details of Unit Under Calibration:** 

**Instrument Specification** : Micro Pipette

Make : Thermo Scientific

Model : Finnpipette Range : 100 to 1000 µl

Sr. No Resolution : 1 µl Id. No. : ESICSSH/MICRO/EQ34 Unit Under Measurement : g

Standard used for calibration:

Calibration Due Instrument Traceability with **Instrument Name** Certificate No. Sr. No. / Id No. On NABL Lab No. Semi Micro Balance METSAR-M-002 MTPL/23/0156/2 26/01/2024 CC-2191

**Environmental Conditions SOP Number Temperature** Humidity MTPL/CL/SOP/MV/03  $23 \pm 1$  °C 40 to 60 % RH

#### Results of Calibration:

Sr. No.	Set Volume in µl	Standard Balance Reading in g	Actual Calculated Volume in µl @ 27 °C	Error (±) in μl	Expanded Uncertainty (±) in µl
1	100	0.10034	100.06	0.06	15
2	300	0.30093	300.09	0.09	15
3	500	0.50151	500.15	0.15	15
4	800	0.80243	800.24	0.24	15
5	1000	1.00305	1000.28	0.28	15

Repeatability Results @ 27 °C:

Sr. No.	Set Volume In µl	Total Service	Actu	ıal Calculated Vo In ul	lume	The same of
-	1000	1000.28	1000.28	1000.32	1000.28	1000.25
1	1000	1000.31	1000.27	1000.24	1000.32	1000.28

#### Remarks:

- The Standard used for calibration is traceable to National/International standards through unbroken chain of Accredited Laboratories.
- Reference Standard and Method used: ISO 8655-6, Gravimetric Method.
- The result stated in this calibration certificate is related only to the item submitted for calibration.
- UUC means Unit Under Calibration.
- The reported expanded uncertainty of measurement is stated at a confidence level of approximately 95.45% with coverage factor k=2.
- Certificate shall not be reproduced except in full without the written approval of the laboratory.
- The instrument was calibrated at Mass and Volume Lab.
- The Recommended Due Date of this calibration certificate is given as per request of customer

eh. Nares

CH. Naresh Sr. Calibration Engineer

MTPL/CL/FF/CC/ME/MP

Calibrated By

Certificate Approved By M. Ramratan Technical Manager

METSAR TECHNOLOGIES PVT. LTD.

An ISO 9001-2015 Certified Company



Calibration Laboratory







Customer Name & Address	Certificate No.	: MTPL/23/1633/6
1 to 1 to 10	Equipment Received On	:23/08/2023
EMPLOYE'S STATE INSURANCE	Equipment Condition	: Satisfactory
CORPORATION SUPER SPECIALITY	Date of Calibration	: 24/08/2023
HOSPITAL, Sanathnagar, Hyderabad – 500038.	Recommended Calibration Due	: 23/08/2024
	Date of issue	: 25/08/2023
MECHANICAL DISCIPLINE (VOLUME)	ULR No.	: CC219123000018004F

Details of Unit Under Calibration:

Instrument Specification
Make
: Micro Pipette
: Thermo Scientific

 Model
 : -- Range
 : 5 to 50 μ

 Sr. No
 : RW22250
 Resolution
 : 0.1 μl

 Id. No.
 : -- Unit Under Measurement
 : μl

Standard used for calibration:

Instrument Name	Instrument Sr. No. / Id No.	Certificate No.	Calibration Due On	Traceability with NABL Lab No.
Micro Balance	METSAR-M-001	MTPL/23/0156/1	26/01/2024	CC-2191
Semi Micro Balance	METSAR-M-002	MTPL/23/0156/2	26/01/2024	CC-2191

Environmen	tal Conditions	SOP Number
Temperature	Humidity	MTDL/CL/COD/MV/02
$23 \pm 1^{\circ}C$	40 to 60 %RH	MTPL/CL/SOP/MV/03

Results of Calibration:

Sr. No.	Set Volume in µl	Standard Balance Reading in g	Actual Calculated Volume in μl @ 27 °C	Error	Expanded Uncertainty (±) in µl
1	5.0	0.005025	5.012	0.012	0.1
2	20.0	0.02021	20.16	0.16	1.2
3	30.0	0.03031	30.24	0.24	1.2
4	40.0	0.04048	40.37	0.37	1.2
5	50.0	0.05067	50.53	0.53	1.2

Repeatability Results @ 27 °C:

Sr. No.	Set Volume In µl	A THE AM	Acti	ıal Calculated Vol In µl	lume	100
1	50.0	50.54	50.51	50.60	50.50	50.63
1	50.0	50.65	50.55	50.48	50.44	50.40

### Remarks:

- a) The Standard used for calibration is traceable to National/International standards through unbroken chain of Accredited Laboratories.
- b) Reference Standard and Method used: ISO 8655-6, Gravimetric Method.
- c) The result stated in this calibration certificate is related only to the item submitted for calibration.
- d) UUC means Unit Under Calibration.
- e) The reported expanded uncertainty of measurement is stated at a confidence level of approximately 95.45% with coverage factor k=2.
- f) Certificate shall not be reproduced except in full without the written approval of the laboratory.
- g) The instrument was calibrated at Mass and Volume Lab-1.
- h) The Recommended Due Date of this calibration certificate is given as per request of customer.

Ch. Naresh

Certificate Approved By
M. Ramratan
Technical Manager

\*\* End of Calibration Certificate\*\*

MTPL/CL/FF/CC/ME/MP

Sr. Calibration Engineer

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Page 1of 1

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Calibration Laboratory

# **CALIBRATION CERTIFICATE**





Customer Name & Address	Certificate No.	: MTPL/23/1905/2	
A GO TO SELL THE SELL	Equipment Received On	: 29/09/2023	150
EMPLOYE'S STATE INSURANCE	<b>Equipment Condition</b>	: Satisfactory	C. 3
CORPORATION SUPER SPECIALITY	Date of Calibration	: 30/09/2023	
HOSPITAL, Sanathnagar, Hyderabad – 500038.	Recommended Calibration Due	: 29/09/2024	
	Date of issue	: 03/10/2023	
MECHANICAL DISCIPLINE (VOLUME)	ULR No.	: CC219123000018754F	

Details of Unit Under Calibration:

Instrument Specification : Micro Pipette

Make : Thermo Scientific

Model : --- Range : 20 to 200 μ

Sr. No : SW03973 Resolution : 0.2 μ1

Id. No. : ESICSSH/MICRO/EQ36 Unit Under Measurement : g

Standard used for calibration:

Instrument Name	Instrument Sr. No. / Id No.	Certificate No.	Calibration Due On	Traceability with NABL Lab No.
Semi Micro Balance	METSAR-M-002	MTPL/23/0156/2	26/01/2024	CC-2191
Micro Balance	METSAR-M-001	MTPL/23/0156/1	26/01/2024	CC-2191

Environmental Conditions		SOP Number
Temperature	Humidity	MTDL/CL/COD/MV/02
$23 \pm 1^{\circ}C$	40 to 60 %RH	MTPL/CL/SOP/MV/03

## Results of Calibration:

Sr. No.	Set Volume in µl	Standard Balance Reading in g	Actual Calculated Volume in μl @ 27 °C	Error ( <u>+</u> ) in μl	Expanded Uncertainty (±) in µl
1	20.0	0.020019	19.980	0.020	1.2
2	50.0	0.05016	50.05	0.05	1.2
3	100.0	0.10037	100.16	0.16	1.2
4	150.0	0.15051	150.21	0.21	15
5	200.0	0.20074	200.36	0.36	15

Repeatability Results @ 27 °C:

Sr. No.	Set Volume In µl	Actual Calculated Volume In μl					
1	200.0	200.33	200.37	200.39	200.35	200.33	
	200.0	200.34	200.36	200.42	200.37	200.39	

#### Remarks:

- a) The Standard used for calibration is traceable to National/International standards through unbroken chain of Accredited Laboratories.
- b) Reference Standard and Method used: ISO 8655-6, Gravimetric Method.
- c) The result stated in this calibration certificate is related only to the item submitted for calibration.
- d) UUC means Unit Under Calibration.
- e) The reported expanded uncertainty of measurement is stated at a confidence level of approximately 95.45% with coverage factor k=2.
- f) Certificate shall not be reproduced except in full without the written approval of the laboratory.
- The instrument was calibrated at Mass and Volume Lab.
- h) The Recommended Due Date of this calibration certificate is given as per request of customer.

Calibrated By G. Satya Swetha Calibration Engineer

Certificate Approved By N. Chanakya Sr. Manager Calibration

METSARDARG CHIBHOGO CPARITICATE\*\*



Calibration Laboratory







## CALIBRATION CERTIFICATE

Customer Name & Address	Certificate No.	: MTPL/23/1633/3
EMPLOYE'S STATE INSURANCE CORPORATION SUPER SPECIALITY	Equipment Received On	: 23/08/2023
	Equipment Condition	: Satisfactory
	Date of Calibration	: 24/08/2023
HOSPITAL, Sanathnagar, Hyderabad – 500038.	Recommended Calibration Due	: 23/08/2024
The same of the sa	Date of issue	: 25/08/2023
MECHANICAL DISCIPLINE (VOLUME)	ULR No.	: CC219123000018001F

Details of Unit Under Calibration:

Instrument Specification : Micro Pipette

Make : Thermo Scientific

Model : Finnpipettes Range : 1 to 10 μl

Sr. No : SW03799 Resolution : 0.02 μl

Id. No. : --- Unit Under Measurement : μl

Standard used for calibration:

Instrument Name	Instrument Sr. No. / Id No.	Certificate No.	Calibration Due On	Traceability with NABL Lab No.	
Micro Balance	METSAR-M-001	MTPL/23/0156/1	26/01/2024	CC-2191	

Environmental Conditions		SOP Number
Temperature Humidity		MTDL/CL/SOD/MV/02
$23 \pm 1^{\circ}$ C	40 to 60 %RH	MTPL/CL/SOP/MV/03

### Results of Calibration:

Sr. No.	Set Volume in µl	Standard Balance Reading in g	Actual Calculated Volume in µl @ 27 °C	Error (±) in μl	Expanded Uncertainty (±) in μl
1	1.00	0.001011	1.009	0.009	0.1
2	3.00	0.003023	3.013	0.013	0.1
3	5.00	0.005037	5.026	0.026	0.1
4	8.00	0.008052	8.031	0.031	0.1
5	10.00	0.010064	10.037	0.037	0.1

Repeatability Results @ 27 °C:

Sr. No.	Set Volume In µl	Actual Calculated Volume In μl					
1	10.00	10.035	10.031	10.034	10.029	10.033	
	10.00	10.034	10.032	10.035	10.031	10.037	

## Remarks:

- a) The Standard used for calibration is traceable to National/International standards through unbroken chain of Accredited Laboratories.
- b) Reference Standard and Method used: ISO 8655-6, Gravimetric Method.
- The result stated in this calibration certificate is related only to the item submitted for calibration.
- d) UUC means Unit Under Calibration.
- e) The reported expanded uncertainty of measurement is stated at a confidence level of approximately 95.45% with coverage factor *k*=2.
- f) Certificate shall not be reproduced except in full without the written approval of the laboratory.
- g) The instrument was calibrated at Mass and Volume Lab-1.
- h) The Recommended Due Date of this calibration certificate is given as per request of customer.

Ch. Novelh.
Calibrated By
CH. Naresh

Sr. Calibration Engineer

MTPL/CL/FF/CC/ME/MP

Certificate Approved By M. Ramratan

Technical manager

\*\* End of Calibration Certificate\*\*

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