

Feel Free to Call us: 1800 425 1316

BANGALURU: 08028437933 | CHENNAI: 044-26263962/ 43500217 | ERODE: 0424 2268969 | KARUR: 04324 235071 | MADURAI 04523026302| METTUPALAYAM: 04254222428 | PALANI: 04545251525 | PALAYAMKOTTAI: 04623242121/ 04623242121 | POLLACHI: 04259220859 | PONDICHERRY : 0413 2220005 | SALEM: 0427 4262775/0427 2336744 | SIVAKASI: 04562 276498 | THANJAVUR: 04362 230556 | THIRUVARUR: 04366 244101 | TIRUPUR: 0421 2242266 | TRICHY: 0431 2760151/ 0431 2763318 | TRIVANDRUM: 0471 3248463COLLECTION CENTERS: VADAVALLI: 0422 4342018 | NALAVINDU: 0422 4369223

**Microbiological
Laboratory**



12A, Cowley Brown Road (E), K.S.P. Ram, Coimbatore - 02
0422 2540525/2556628/2550673/4354242/2541316
microlab@microlabindia.com
www.microlabindia.com

CERTIFICATE OF CALIBRATION - HYGROMETER

Test Hygrometer Details

Department	Tirunelveli Branch
Temperature Range	22°C to 30°C
Thermometer	HTC-1
Serial No	MBL/TVL/SC/TM3
Thermometer Location	Sample Collection Area

Thermometer Applications and its Acceptable Limits

Fridge	Fridge Freezer Compartment	Serology Incubator	Room Temperature		BOD Incubator	Microbiology Incubator
			Lab Testing Area	Store Room		
± 2° C	± 5° C	± 1° C	± 2° C	± 5° C	± 2° C	± 2° C

TEST READINGS AND CALCULATION

NIST Traceable Thermometer	Serial No	Range	Observed Temperature NIST Thermometer	*Correction Factor	**Corrected Temperature NIST Thermometer	Calibrated On	Due Date
	400182	-50°C to 100°C	50.005	0.095	49.91	23/04/2019	23/04/2020

*Correction Factor: Given in the Calibration Certificate for that observed temperature of the NIST Thermometer.

**Corrected Temperature of the NIST Thermometer = Observed Temperature NIST Thermometer ± Correction Factor.


Test Hygrometer	Serial No	Range	**Corrected Temperature NIST Thermometer	Observed Temperature TEST Thermometer	¶ Obtained correction factor TEST Thermometer	Acceptable Limit	Is the Obtained correction factor is within the Acceptable limit?
(HTC-1)	MBL/TVL/SC/TM3	-50°C to 70°C	24.7	25.0	-0.3	± 2° C	YES

¶ Obtained Correction factor of the TEST Thermometer = Corrected Temperature of the NIST Thermometer - Observed Temperature TEST Thermometer.

Note: Based on the nature of thermometer application round off the values to the single digit.(for ex: If 37.3 round off to 37.0, if its 37.6 round off to 38)

IF Yes – The calibration is valid. Note the obtained correction factor in the calibration label indicating Plus or Minus. When routinely recording temperature, add the correction factor for that specific thermometer to the observed temperature and it must be recorded on a printed worksheet with date, analyst initials and comments.

IF No – Repeat the process one time and if fails again document the corrective action at the back side of this sheet.

CALIBRATION STATUS		Calibrated On: March 2020	Due Date: March 2021
PASS	✓		
FAIL			
Performed by:	<i>P. [Signature]</i>	Comments: 	
Reviewed by and Approved by:	<i>K. [Signature]</i>		

*This calibration was performed gravimetrically using equipment that is traceable through NIST to the International System of Units (SI). Testing methodology is compliant with ISO 8655. This calibration certificate described and shall not be reproduced other than in full. Microbiological Laboratory is accredited to ISO/IEC 15189:2012 for Quality Management system and continuously monitors its effectiveness.
Ref: ISO 8655-1:2002 man

Feel Free to Call us: 1800 425 1316

BANGALURU: 08028437933 | CHENNAI: 044-26263962/ 43500217 | ERODE: 0424 2268969 | KARUR: 04324 235071 | MADURAI 04523026302| METTUPALAYAM: 04254222428 | PALANI: 04545251525 | PALAYAMKOTTAI: 04623242121/ 04623242121 | POLLACHI: 04259220859 | PONDICHERRY : 0413 2220005 | SALEM: 0427 4262775/0427 2336744 | SIVAKASI: 04562 276498 | THANJAVUR: 04362 230556 | THIRUVARUR: 04366 244101 | TIRUPUR: 0421 2242266 | TRICHY: 0431 2760151/ 0431 2763318 | TRIVANDRUM: 0471 3248463COLLECTION CENTERS: VADAVALLI: 0422 4342018 | NALAVINDU: 0422 4369223

Microbiological
Laboratory

12A, Cowley Brown Road (E), RS PURAM,
COIMBATORE - 641002
0422 2540525, 2556628, 2550673 Fax: 0422 2541316
microlabcbe@microlabindia.com
www.microlabindia.com



CERTIFICATE OF CALIBRATION - HYGROMETER

Test Hygrometer Details

Department	Tirunelveli Branch
Temperature Range	22°C to 30°C
Thermometer	HTC-1
Serial No	MBL/TVL/RA/TM2
Thermometer Location	Reception Area

Thermometer Applications and its Acceptable Limits

Fridge	Fridge Freezer Compartment	Serology Incubator	Room Temperature		BOD Incubator	Microbiology Incubator
			Lab Testing Area	Store Room		
± 2° C	± 5° C	± 1° C	± 2° C	± 5° C	± 2° C	± 2° C

TEST READINGS AND CALCULATION

NIST Traceable Thermometer	Serial No	Range	Observed Temperature NIST Thermometer	*Correction Factor	**Corrected Temperature NIST Thermometer	Calibrated On	Due Date
	400182	-50°C to 100°C	50.005	0.095	49.91	23/04/2019	23/04/2020

*Correction Factor: Given in the Calibration Certificate for that observed temperature of the NIST Thermometer.

**Corrected Temperature of the NIST Thermometer = Observed Temperature NIST Thermometer ± Correction Factor.

Test Hygrometer	Serial No	Range	**Corrected Temperature NIST Thermometer	Observed Temperature TEST Thermometer	¶ Obtained correction factor TEST Thermometer	Acceptable Limit	Is the Obtained correction factor is within the Acceptable limit?
(HTC-1)	MBL/TVL/RA/TM2	-50°C to 70°C	24.9	24.5	0.4	± 2° C	YES

¶ Obtained Correction factor of the TEST Thermometer =

Corrected Temperature of the NIST Thermometer - Observed Temperature TEST Thermometer.

Note: Based on the nature of thermometer application round off the values to the single digit.(for ex: If 37.3 round off to 37.0, if its 37.6 round off to 38)

IF Yes – The calibration is valid. Note the obtained correction factor in the calibration label indicating Plus or Minus. When routinely recording temperature, add the correction factor for that specific thermometer to the observed temperature and it must be recorded on a printed worksheet with date, analyst initials and comments.

IF No – Repeat the process one time and If fails again document the corrective action at the back side of this sheet.

CALIBRATION STATUS		Calibrated On: March 2020	Due Date: March 2021
PASS	✓		
FAIL			
Performed by:	P. Rang	Comments:	
Reviewed by and Approved by:	K M		

*This calibration was performed gravimetrically using equipment that is traceable through NIST to the International System of Units (SI). Testing methodology is compliant with ISO 8655. This calibration certificate is described and shall not be reproduced other than in full. Microbiological Laboratory is accredited to ISO/IEC 15189:2012 for Quality Management system and continuously monitors its effectiveness
Ref: ISO 8655-1:2002 man

Feel Free to Call us: 1800 425 1316

BANGALURU: 08028437933 | CHENNAI: 044-26263962/ 43500217 | ERODE: 0424 2268969 | KARUR: 04324 235071 | MADURAI 04523026302| METTUPALAYAM: 04254222428 | PALANI: 04545251525 | PALAYAMKOTTAI: 04623242121/ 04623242121 | POLLACHI: 04259220859 | PONDICHERRY : 0413 2220005 | SALEM: 0427 4262775/0427 2336744 | SIVAKASI: 04562 276498 | THANJAVUR: 04362 230556 | THIRUVARUR: 04366 244101 | TIRUPUR: 0421 2242266 | TRICHY: 0431 2760151/ 0431 2763318 | TRIVANDRUM: 0471 3248463COLLECTION CENTERS: VADAVALLI: 0422 4342018 | NALAVINDU: 0422 4369223

**Microbiological
Laboratory**



12A, Cowley Brown Road (E), R.S Puram, Coimbatore - 02
0422 2540525/2556628/2550673/4354242/2541316
microblab@microbindia.com
www.microbindia.com

CERTIFICATE OF CALIBRATION - HYGROMETER

Test Hygrometer Details

Department	Tirunelveli Branch
Temperature Range	22°C to 28°C
Thermometer	HTC-1
Serial No	MBL/TVL/SP/TM1
Thermometer Location	Processing Area

Thermometer Applications and its Acceptable Limits

Fridge	Fridge Freezer Compartment	Serology Incubator	Room Temperature		BOD Incubator	Microbiology Incubator
			Lab Testing Area	Store Room		
± 2° C	± 5° C	± 1° C	± 2° C	± 5° C	± 2° C	± 2° C

TEST READINGS AND CALCULATION

NIST Traceable Thermometer	Serial No	Range	Observed Temperature NIST Thermometer	*Correction Factor	**Corrected Temperature NIST Thermometer	Calibrated On	Due Date
	400182	-50°C to 100°C	50.005	0.095	49.91	23/04/2019	23/04/2020

*Correction Factor: Given in the Calibration Certificate for that observed temperature of the NIST Thermometer.

**Corrected Temperature of the NIST Thermometer = Observed Temperature NIST Thermometer ± Correction Factor.

Test Hygrometer (HTC-1)	Serial No	Range	**Corrected Temperature NIST Thermometer	Observed Temperature TEST Thermometer	¶ Obtained correction factor TEST Thermometer	Acceptable Limit	Is the Obtained correction factor is within the Acceptable limit?
	MBL/TVL/SP/TM1	-50°C to 70°C	26.5	26.7	-0.2	± 2° C	YES

¶ Obtained Correction factor of the TEST Thermometer = Corrected Temperature of the NIST Thermometer - Observed Temperature TEST Thermometer.

Note: Based on the nature of thermometer application round off the values to the single digit.(for ex: If 37.3 round off to 37.0, if its 37.6 round off to 38)

IF Yes – The calibration is valid. Note the obtained correction factor in the calibration label indicating Plus or Minus. When routinely recording temperature, add the correction factor for that specific thermometer to the observed temperature and it must be recorded on a printed worksheet with date, analyst initials and comments.

IF No – Repeat the process one time and If fails again document the corrective action at the back side of this sheet.

CALIBRATION STATUS		Calibrated On: March 2020	Due Date: March 2021
PASS	✓		
FAIL			
Performed by:	<i>P. Dangi</i>		
Reviewed by and Approved by:	<i>K. M</i>		

*This calibration was performed gravimetrically using equipment that is traceable through NIST to the International System of Units (SI). Testing methodology is compliant with ISO 8655. This calibration certificate is described and shall not be reproduced other than in full. Microbiological Laboratory is accredited to ISO/IEC 15189:2013 for Quality Management system and continuously monitors its effectiveness.
Ref: ISO 8655-1:2002 man

Feel Free to Call us: 1800 425 1316

BANGALURU: 08028437933 | CHENNAI: 044-26263962/ 43500217 | ERODE: 0424 2268969 | KARUR: 04324 235071 | MADURAI 04523026302 | METTUPALAYAM: 04254222428 | PALANI: 04545251525 | PALAYAMKOTTAI: 04623242121/ 04623242121 | POLLACHI: 04259220859 | PONDICHERRY : 0413 2220005 | SALEM: 0427 4262775/0427 2336744 | SIVAKASI: 04562 276498 | THANJAVUR: 04362 230556 | THIRUVARUR: 04366 244101 | TIRUPUR: 0421 2242266 | TRICHY: 0431 2760151/ 0431 2763318 | TRIVANDRUM: 0471 3248463 COLLECTION CENTERS: VADAVALLI: 0422 4342018 | NALAVINDU: 0422 4369223

**Microbiological
Laboratory**



12A, Cowley Brown Road, Lt. R.S Puram, Coimbatore - 02
0422 2540525/2556628/2550673/4354242/2541316
microbiologicalcenterlabindia.com
www.microbiolabindia.com

CERTIFICATE OF CALIBRATION - FRIDGE / FREEZER

Test Thermometer Details

Location	Tirunelveli Branch
Fridge / Freezer / Incubator Range	2 to 8°C
Fridge / Freezer / Incubator Make	Whirlpool
Serial No	INA030300674
Thermometer Location	Inside the fridge

Thermometer Applications and its Acceptable Limits

Fridge	Fridge Freezer Compartment	Serology Incubator	Room Temperature		BOD Incubator	Microbiology Incubator
			Lab Testing Area	Store Room		
± 2° C	± 5° C	± 1° C	± 2° C	± 5° C	± 2° C	± 2° C

TEST READINGS AND CALCULATION

NIST Traceable Thermometer	Serial No	Range	Observed Temperature NIST Thermometer	*Correction Factor	**Corrected Temperature NIST Thermometer	Calibrated On	Due Date
	400182	-50°C to 100°C	50.005	0.095	49.91	23/04/2019	23/04/2020

*Correction Factor: Given in the Calibration Certificate for that observed temperature of the NIST Thermometer.

**Corrected Temperature of the NIST Thermometer = Observed Temperature NIST Thermometer ± Correction Factor.


Test Thermometer (Selec CH 403)	Serial No	Range	**Corrected Temperature NIST Thermometer	Observed Temperature TEST Thermometer	¶ Obtained correction factor TEST Thermometer	Acceptable Limit	Is the Obtained correction factor is within the Acceptable limit?
	(MBL/TVL/F /TM2)	-50°C to 100°C	4.6	4.9	-0.3	± 2° C	YES

¶ Obtained Correction factor of the TEST Thermometer = Corrected Temperature of the NIST Thermometer - Observed Temperature TEST Thermometer.

Note: Based on the nature of thermometer application round off the values to the single digit.(for ex: If 37.3 round off to 37.0, if its 37.6 round off to 38)

IF Yes – The calibration is valid. Note the obtained correction factor in the calibration label indicating Plus or Minus. When routinely recording temperature, add the correction factor for that specific thermometer to the observed temperature and it must be recorded on a printed worksheet with date, analyst initials and comments.

IF No – Repeat the process one time and If fails again document the corrective action at the back side of this sheet.

CALIBRATION STATUS		Calibrated On: March 2020	Due on: March 2021
PASS	✓		
FAIL			
Performed by:	<i>P. Ravi</i>	Comments: 	
Reviewed by and Approved by:	<i>K. M.</i>		

* This calibration was performed gravimetrically using equipment that is traceable through NIST to the International System of Units (SI). Testing methodology is compliant with ISO 9653. This calibration certificate described and shall not be reproduced other than in full. Microbiological Laboratory is accredited to ISO/IEC 15189:2012 for Quality Management system and continuously monitors its effectiveness.
Ref: ISO 8655-1:2002 man

Feel Free to Call us: 1800 425 1316

BANGALURU: 08028437933 | CHENNAI: 044-26263962/ 43500217 | ERODE: 0424 2268969 | KARUR: 04324 235071 | MADURAI 04523026302 | METTUPALAYAM: 04254222428 | PALANI: 04545251525 | PALAYAMKOTTAI: 04623242121/ 04623242121 | POLLACHI: 04259220859 | PONDICHERRY : 0413 2220005 | SALEM: 0427 4262775/0427 2336744 | SIVAKASI: 04562 276498 | THANJAVUR: 04362 230556 | THIRUVARUR: 04366 244101 | TIRUPUR: 0421 2242266 | TRICHY: 0431 2760151/ 0431 2763318 | TRIVANDRUM: 0471 3248463 COLLECTION CENTERS: VADAVALLI: 0422 4342018 | NALAVINDU: 0422 4369223

Microbiological Laboratory



12A, Cowley Brown Road (E), R.S.Puram, Chumbalore - 02
0422 2540525/2556628/2550673/4354242/25413 16
microlab@microbiolabindia.com
www.microbiolabindia.com

CERTIFICATE OF CALIBRATION - FRIDGE / FREEZER

Test Thermometer Details

Location	Tirunelveli Branch
Fridge / Freezer / Incubator Range	2 to 8°C
Fridge / Freezer / Incubator Make	LG
Serial No	804LPUH000798
Thermometer Location	Inside the fridge

Thermometer Applications and its Acceptable Limits

Fridge	Fridge Freezer Compartment	Serology Incubator	Room Temperature		BOD Incubator	Microbiology Incubator
			Lab Testing Area	Store Room		
± 2° C	± 5° C	± 1° C	± 2° C	± 5° C	± 2° C	± 2° C

TEST READINGS AND CALCULATION

NIST Traceable Thermometer	Serial No	Range	Observed Temperature NIST Thermometer	*Correction Factor	**Corrected Temperature NIST Thermometer	Calibrated On	Due Date
	400182	-50°C to 100°C	50.005	0.095	49.91	23/04/2019	23/04/2020

*Correction Factor: Given in the Calibration Certificate for that observed temperature of the NIST Thermometer.

**Corrected Temperature of the NIST Thermometer = Observed Temperature NIST Thermometer ± Correction Factor.

Test Thermometer (Selec TC 303)	Serial No	Range	**Corrected Temperature NIST Thermometer	Observed Temperature TEST Thermometer	¶ Obtained correction factor TEST Thermometer	Acceptable Limit	Is the Obtained correction factor is within the Acceptable limit?
	(MBL/TVL/F/TM1)	-50°C to 150°C	6.4	6.9	-0.5	± 2° C	YES

¶ Obtained Correction factor of the TEST Thermometer = Corrected Temperature of the NIST Thermometer - Observed Temperature TEST Thermometer.

Note: Based on the nature of thermometer application round off the values to the single digit.(for ex: If 37.3 round off to 37.0, if its 37.6 round off to 38)

IF Yes – The calibration is valid. Note the obtained correction factor in the calibration label indicating Plus or Minus. When routinely recording temperature, add the correction factor for that specific thermometer to the observed temperature and it must be recorded on a printed worksheet with date, analyst initials and comments.

IF No – Repeat the process one time and If fails again document the corrective action at the back side of this sheet.

CALIBRATION STATUS		Calibrated On: March 2020	Due on: March 2021
PASS	✓		
FAIL			
Performed by:	P. Durgam	Comments:	
Reviewed by and Approved by:	K. M. E		

*This calibration was performed gravimetrically using equipment that is traceable through NIST to the International System of Units (SI). Testing methodology is compliant with ISO 8655. This calibration certificate described and shall not be reproduced other than in full. Microbiological Laboratory is accredited to ISO/IEC 15189:2012 for Quality Management system and continuously monitors its effectiveness. Ref: ISO 8655-1:2002 man

Feel Free to Call us: 1800 425 1316

BANGALURU: 08028437933 | CHENNAI: 044-26263962/ 43500217 | ERODE: 0424 2268969 | KARUR: 04324 235071 | MADURAI 04523026302| METTUPALAYAM: 04254222428 | PALANI: 04545251525 | PALAYAMKOTTAI: 04623242121/ 04623242121 | POLLACHI: 04259220859 | PONDICHERRY : 0413 2220005 | SALEM: 0427 4262775/0427 2336744 | SIVAKASI: 04562 276498 | THANJAVUR: 04362 230556 | THIRUVARUR: 04366 244101 | TIRUPUR: 0421 2242266 | TRICHY: 0431 2760151/ 0431 2763318 | TRIVANDRUM: 0471 3248463 COLLECTION CENTERS: VADAVALLI: 0422 4342018 | NALAVINDU: 0422 4369223

**Microbiological
Laboratory**



12A, Cowley Brawn Road (E), R.S.Puram, Coimbatore - 02
0422 2540525/2556628/2550673/4354242/2541316
microlab@microlabindia.com
www.microlabindia.com

CERTIFICATE OF CALIBRATION - THERMOMETER

Test Thermometer Details

Department	Tirunelveli Branch
Temperature Range	2 to 10°C
Thermometer	Immersion
Serial No	MBL/TVL/SP/TM1
Thermometer Location	Inside the Box (Sample Packing Box)

Thermometer Applications and its Acceptable Limits

Fridge	Fridge Freezer Compartment	Serology Incubator	Room Temperature		BOD Incubator	Microbiology Incubator
			Lab Testing Area	Store Room		
± 2° C	± 5° C	± 1° C	± 2° C	± 5° C	± 2° C	± 2° C

TEST READINGS AND CALCULATION

NIST Traceable Thermometer	Serial No	Range	Observed Temperature NIST Thermometer	*Correction Factor	**Corrected Temperature NIST Thermometer	Calibrated On	Due Date
	400182	-50°C to 100°C	50.005	0.095	49.91	23/04/2019	23/04/2020

*Correction Factor: Given in the Calibration Certificate for that observed temperature of the NIST Thermometer.

**Corrected Temperature of the NIST Thermometer = Observed Temperature NIST Thermometer ± Correction Factor.

Test Thermometer	Serial No	Range	**Corrected Temperature NIST Thermometer	Observed Temperature TEST Thermometer	¶ Obtained correction factor TEST Thermometer	Acceptable Limit	Is the Obtained correction factor is within the Acceptable limit?
(Immersion)	MBL/TVL/S PB/TM1	-10°C to 110°C	5.6	5.8	-0.2	± 5° C	YES

¶ Obtained Correction factor of the TEST Thermometer = Corrected Temperature of the NIST Thermometer - Observed Temperature TEST Thermometer.

Note: Based on the nature of thermometer application round off the values to the single digit.(for ex: If 37.3 round off to 37.0, if its 37.6 round off to 38)

IF Yes – The calibration is valid. Note the obtained correction factor in the calibration label indicating Plus or Minus. When routinely recording temperature, add the correction factor for that specific thermometer to the observed temperature and it must be recorded on a printed worksheet with date, analyst initials and comments.

IF No – Repeat the process one time and If fails again document the corrective action at the back side of this sheet.

CALIBRATION STATUS		Calibrated On: March 2020	Due Date: March 2021
PASS	✓		
FAIL			
Performed by:	<i>P. Devi</i>	Comments:	
Reviewed by and Approved by:	<i>K.M.</i>		

*This calibration was performed gravimetrically using equipment that is traceable through NIST to the International System of Units (SI). Testing methodology is compliant with ISO 8655. This calibration certificate is described and shall not be reproduced other than in full. Microbiological Laboratory is accredited to ISO/IEC 15189:2012 for Quality Management system and continuously monitors its effectiveness. Ref: ISO 8655-1:2002 man

Feel Free to Call us: 1800 425 1316

INDORE : 0731 6633111 | BANGALURU: 08028437933 | CHENNAI: 044-26263962/43500217 | ERODE: 0424 2268969 | KARUR: 04324 235071 | MADURAI 04523026302 | METTUPALAYAM: 04254222428 | PALANI: 04545251525 | PALAYAMKOTTAI: 04623242121/ 04623242121 | POLLACHI: 04259220859 | PONDICHERRY : 0413 2220005 | SALEM: 0427 4262775/ 0427 2336744 | SIVAKASI: 04562 276498 | THANJAVUR: 04362 230556 | THIRUVARUR: 04366 244101 | TIRUPUR: 0421 2242266 | TRICHY: 0431 2760151/ 0431 2763318 | TRIVANDRUM: 0471 3248463 COLLECTION CENTERS: VADAVALLI: 0422 4342018 | CURA: 0422 4369223 | RAJALAKSHMI NAGAR: 0422 2598049

Microbiological Laboratory



12A, Cowley Brown Road(LI, R.S Puram, Coimbatore - 02
0422 2540525/2556628/2550673/4354242/2541316
microlab@microbindia.com
www.microbindia.com

CERTIFICATE OF CALIBRATION - CENTRIFUGE

Centrifuge Model No	CF 811
Location	Tirunelveli Branch
Instrument Serial No	9480
Brand / Company Name	Greiner Bio One
Range	5000 RPM
Date of Calibration	March 2020
Due date	March 2021

Room Temperature	25 °C	Humidity	49
------------------	-------	----------	----

Name of the Standard Equipment Used	Model	Serial No	Calibrated on	Due date	Certified By	Certificate No
Digital Optical Tachometer	HTM560	16-1141	23/04/2019	23/04/2020	Transcal	TSC/19-20/1918-4

S.No	Centrifuge Speed (RPM)	Acceptable Speed Range		Tachometer Reading (RPM)	Overall Calibration Status		Remarks
					PASS	FAIL	
1	1500	1425	1575	1490	✓		
2	3000	2850	3150	4125	✓		
3	4500	4275	4725	4580	✓		

Rotation Speed Criteria: Acceptable difference must be within $\pm 5\%$ of required rotation rate.

Name of the Standard Equipment Used	Model	Serial No	Calibrated on	Due date
Reference Timer	SW-306	-	20/04/2019	20/04/2020

S.No	Centrifuge Time Setting	Acceptable Time Range		Reference Timer Setting	Overall Calibration Status		Remarks
	Minutes	Minutes		Minutes	PASS	FAIL	
1	3	2Mins:51Secs	3Mins:09Secs	2Mins:55Secs	✓		
2	5	4Mins:45 Secs	5Mins:15Secs	4Mins:49Secs			

Timer Criteria: Acceptable difference must be within $\pm 5\%$ of timer setting.

Calibration done by : *P. D. Singh*

Calibration report verified by : *K. M. S.*



*This calibration was performed gravimetrically using equipment that is traceable through NIST to the International System of Units (SI). Testing methodology is compliant with ISO 8655. This calibration certificate applies only to the item described and shall not be reproduced other than in full. Microbiological Laboratory is accredited to ISO/IEC 15189:2012 for Quality Management system and continuously monitors its effectiveness. Ref: ISO 8655-1:2002 manual

Feel Free to Call us: 1800 425 1316

INDORE : 0731 6633111 | BANGALURU: 08028437933 | CHENNAI: 044-26263962/43500217 | ERODE: 0424 2268969 | KARUR: 04324 235071 | MADURAI 04523026302 | METTUPALAYAM: 04254222428 | PALANI: 04545251525 | PALAYAMKOTTAI: 04623242121/ 04623242121 | POLLACHI: 04259220859 | PONDICHERRY : 0413 2220005 | SALEM: 0427 4262775/ 0427 2336744 | SIVAKASI: 04562 276498 | THANJAVUR: 04362 230556 | THIRUVARUR: 04366 244101 | TIRUPUR: 0421 2242266 | TRICHY: 0431 2760151/ 0431 2763318 | TRIVANDRUM: 0471 3248463 COLLECTION CENTERS: VADAVALLI: 0422 4342018 | CURA: 0422 4369223 | RAJALAKSHMI NAGAR: 0422 2598049

Microbiological Laboratory



12A, Cowley Brown Road (E), R.S Puram, Coimbatore - 02
0422 2540525/2556628/2550673/4354242/2541316
microlabs@microbindia.com
www.microbindia.com

CERTIFICATE OF CALIBRATION - CENTRIFUGE

Centrifuge Model No	R8C BL
Location	Tirunelveli Branch
Instrument Serial No	ZCCN 07236
Brand / Company Name	REMI
Range	6000 RPM
Date of Calibration	March 2020
Due date	March 2021

Room Temperature	25 °C	Humidity	49
------------------	-------	----------	----

Name of the Standard Equipment Used	Model	Serial No	Calibrated on	Due date	Certified By	Certificate No
Digital Optical Tachometer	HTM560	16-1141	23/04/2019	23/04/2020	Transcal	TSC/19-20/1918-4

S.No	Centrifuge Speed (RPM)	Acceptable Speed Range		Tachometer Reading (RPM)	Overall Calibration Status		Remarks
					PASS	FAIL	
1	1500	1425	1575	1490	✓		
2	4000	3800	4200	4125	✓		
3	6000	5700	6300	5900	✓		

Rotation Speed Criteria: Acceptable difference must be within ± 5% of required rotation rate.

Name of the Standard Equipment Used	Model	Serial No	Calibrated on	Due date
Reference Timer	SW-306	-	20/04/2019	20/04/2020

S.No	Centrifuge Time Setting	Acceptable Time Range		Reference Timer Setting	Overall Calibration Status		Remarks
	Minutes	Minutes		Minutes	PASS	FAIL	
1	3	2Mins:51Secs	3Mins:09Secs	2Mins:59Secs	✓		
2	5	4Mins:45 Secs	5Mins:15Secs	4Mins:56Secs	✓		

Timer Criteria: Acceptable difference must be within ± 5% of timer setting.

Calibration done by : P. Dany

Calibration report verified by : K. M.



*This calibration was performed gravimetrically using equipment that is traceable through NIST to the International System of Units (SI). Testing methodology is compliant with ISO 8655. This calibration certificate applies only to the item described and shall not be reproduced other than in full. Microbiological Laboratory is accredited to ISO/IEC 15189:2012 for Quality Management system and continuously monitors its effectiveness. Ref: ISO 8655-1:2002 manual

Feel Free to Call us: 1800 425 1316

BANGALURU: 08028437933 | CHENNAI: 044-26263962/ 43500217 | ERODE: 0424 2268969 | KARUR: 04324 235071 | MADURAI 04523026302| METTUPALAYAM: 04254222428 | PALANI: 04545251525 | PALAYAMKOTTAI: 04623242121/ 04623242121 | POLLACHI: 04259220859 | PONDICHERRY : 0413 2220005 | SALEM: 0427 4262775/0427 2336744 | SIVAKASI: 04562 276498 | THANJAVUR: 04362 230556 | THIRUVARUR: 04366 244101 | TIRUPUR: 0421 2242266 | TRICHY: 0431 2760151/ 0431 2763318 | TRIVANDRUM: 0471 3248463 COLLECTION CENTERS: VADAVALLI: 0422 4342018 | NALAVINDU: 0422 4369223

**Microbiological
Laboratory**



12A, Cowley Brown Road (E), R.S Puram, Coimbatore - 02
0422 2540525/2556628/2550673/4354242/2541316
microlabce@microlabindia.com
www.microlabindia.com

CERTIFICATE OF CALIBRATION - FRIDGE / FREEZER

Test Thermometer Details

Location	Tirunelveli Branch
Fridge / Freezer / Incubator Range	2° C to 8° C
Fridge / Freezer / Incubator Make	Blue Star
Serial No	96298102968000075
Thermometer Location	Inside the fridge

Thermometer Applications and its Acceptable Limits

Fridge	Fridge Freezer Compartment	Serology Incubator	Room Temperature		BOD Incubator	Microbiology Incubator
			Lab Testing Area	Store Room		
± 2° C	± 5° C	± 1° C	± 2° C	± 5° C	± 2° C	± 2° C

TEST READINGS AND CALCULATION

NIST Traceable Thermometer	Serial No	Range	Observed Temperature NIST Thermometer	*Correction Factor	**Corrected Temperature NIST Thermometer	Calibrated On	Due Date
	400182	-50°C to 100°C	8.2	-0.4	8.6	23/04/2019	23/04/2020

*Correction Factor: Given in the Calibration Certificate for that observed temperature of the NIST Thermometer.

**Corrected Temperature of the NIST Thermometer = Observed Temperature NIST Thermometer ± Correction Factor.

Test Thermometer (Selec CH403)	Serial No	Range	**Corrected Temperature NIST Thermometer	Observed Temperature TEST Thermometer	¶ Obtained correction factor TEST Thermometer	Acceptable Limit	Is the Obtained correction factor is within the Acceptable limit?
	MBL/TVL/F/TM3	-50°C to 150°C	5.6	5.1	0.5	± 2° C	YES

¶ Obtained Correction factor of the TEST Thermometer = Corrected Temperature of the NIST Thermometer - Observed Temperature TEST Thermometer.

Note: Based on the nature of thermometer application round off the values to the single digit. (for ex: If 37.3 round off to 37.0, if its 37.6 round off to 38)

IF Yes – The calibration is valid. Note the obtained correction factor in the calibration label indicating Plus or Minus. When routinely recording temperature, add the correction factor for that specific thermometer to the observed temperature and it must be recorded on a printed worksheet with date, analyst initials and comments.

IF No – Repeat the process one time and If fails again document the corrective action at the back side of this sheet.

CALIBRATION STATUS		Calibrated On: March 2020	Due on: March 2021
PASS	✓		
FAIL			
Performed by:	<i>P. B. S.</i>	Comments:	
Reviewed by and Approved by:	<i>K. S. S.</i>		

*This calibration was performed gravimetrically using equipment that is traceable through NIST to the International System of Units (SI). Testing methodology is compliant with ISO 8655. This calibration certificate described and shall not be reproduced other than in full. Microbiological Laboratory is accredited to ISO/IEC 15189:2012 for Quality Management System and continuously monitors its effectiveness. Ref: ISO 8655-1:2002 man