



TULIP DIAGNOSTICS (P) LTD.

TULIP DIAGNOSTICS (P). LTD. (INSTRUMENT DIVISION)

a PerkinElmer company

BAMBOLIM, ST-INEZ & VERNA - GOA

CIN: U85195GA1988PTC005717

Ref SOP No: SOP/ID/013
CC No: CC/18/ID/001

CALIBRATION CERTIFICATE

Model : *Turbodyne-SC*

Calibration Date: *01/06/2019*

Sr. No.: *P15070195*

Calibration Due Date: *31/05/2020*

- 1) SCOPE: CALIBRATION OF Turbodyne SC
- 2) ITEM DETAIL: Nomenclature Turbidimetry & Neplometer analyser
Type / Model: Turbodyne SC
- 3) DETAILS OF TEST EQUIPMENTS USED:
 - 1) Glass Thermometer
 - 2) Digital Stop Watch
- 4) MEASUREMENTS AND CHECKS CARRIED OUT UNDER STANDARD LABORATORY CONDITIONS.
AMBIENT TEMPERATURE: 25.0 °C – 30.0°C RH %: 80.0
- 5) TEST RANGE AND ACCURACY:
 - 1) Reading chamber Block Temperature: ± 1 °C of 37 °C

OBSERVATION:

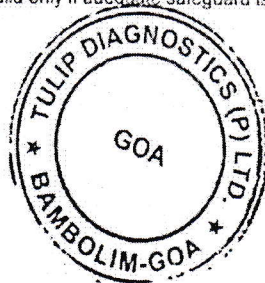
MODULE	READINGS					Range	ERROR OBSERVED	RESULT
	1	2	3	4	5			
1 TEMP IN °C	36.7	36.9	36.7	37	36.6	< ± 1 °C	< ± 0.2 °C	PASS
2 Machine Chronometer in seconds	5	50	120	300	600	< 5%	< 5%	PASS
3 External Chronometer check count in seconds	4.72	48.5	118.2	296	591	< 5%	< 5%	PASS

6) CONCLUSION & REMARKS:

- 1) The Standards used for calibration were calibrated using reference standards traceable to National Standards. Reference standards traceability details are as given below:

SR NO	DESCRIPTION	SLNO /MODEL	BASIC ACCURACY	TRACEABILITY
1	Glass Thermometer	MT1801/ZEAL	± 0.1 °C	QATECH/GOA/01/19/MT1801
2	Digital Stop Watch	901194005647 / NIVIA	± 0.07 sec	QATECH/GOA/01/19/901194005647

- 2) Calibration of instruments valid only if it is ensured that handling, preservation and storage of the instruments is such that accuracy and fitness for use is maintained.
- 3) Calibration of instruments is valid only if it is used under specified environmental conditions.
- 4) Calibration of instruments is valid only if adequate safeguard is provided during servicing and maintenance.



CALIBRATED BY: *[Signature]*

APPROVED BY: *[Signature]*

[Signature]
[Lalsab Nadeaf]

FM/ID/029-00



CALIBRATION CERTIFICATE

Model : *Turbodyne-SC Incubator*
Sr. No.: *734*

Calibration Date: *01/06/2019*

Calibration Due Date: *31/05/2020*

- 1) SCOPE: CALIBRATION OF Turbodyne SC Incubator
- 2) ITEM DETAIL: Nomenclature Incubator
Type / Model Turbodyne SC Incubator
- 3) DETAILS OF TEST EQUIPMENTS USED:
1) Glass Thermometer
- 4) MEASUREMENTS AND CHECKS CARRIED OUT UNDER STANDARD LABORATORY CONDITIONS.
AMBIENT TEMPERATURE: 25.0 °C – 30.0°C RH %: 80.0
- 5) TEST RANGE AND ACCURACY:
1) Incubator Temperature: ± 1 °C of 37 °C

OBSERVATION:

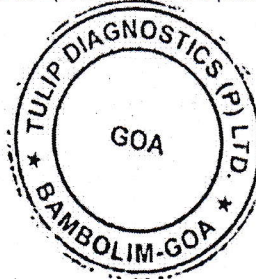
MODULE	READINGS						Range	ERROR OBSERVED	RESULT	
	1	2	3	4	5	Mean				
1	TEMP IN °C	36.6	36.7	36.5	36.9	36.8	36.7	± 1 °C	< ± 0.3°C	PASS

6) CONCLUSION & REMARKS:

- 1) The Standards used for calibration were calibrated using reference standards traceable to National Standards. Reference standards traceability details are as given below:

SR.NO	DESCRIPTION	SLNO./MODEL	BASIC ACCURACY	TRACEABILITY
1	Glass Thermometer	MT1801/ ZEAL	± 0.1° c	GATECH/GOA/01/19/MT1801

- 2) Calibration of instruments valid only if it is ensured that handling, preservation and storage of the instruments is such that accuracy and fitness for use is maintained.
- 3) Calibration of instruments is valid only if it is used under specified environmental conditions.
- 4) Calibration of instruments is valid only if adequate safeguard is provided during servicing and maintenance.



CALIBRATED BY: *[Signature]*

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