

CALIBRATION CERTIFICATE

NAME OF CUSTOMER : LIFETECH DIAGNOSTICS, SALEM

UNIT DESCRIPTION : REFRIGERATOR

COMPANY : LLOYD

SERIAL NO : MIKAG32F01720

DATE OF CALIBRATION : 01.03.2023

VALID UP TO : 31.3.2024

INSTRUMENT USED FOR CALIBRATION: DIGITAL THERMOMETER

MODEL NO:KUSAM-MECO&KM-945

SL.NO: S1023388

CERTIFIED BY: MSIR INDIA PVT. LTD

INSTRUMENT VALIDITY: 22-02-2024

ENVIROMENTAL CONDITION:

S.NO	Instrument Temperature Displayed	Thermometer Temperature Displayed	Difference $\pm 1^{\circ}\text{c}$	Remarks
1.	TOP - $+4^{\circ}\text{C}$	$+4.1^{\circ}\text{C}$	0.1	OK
2.	MIDDLE - $+4^{\circ}\text{C}$	$+4^{\circ}\text{C}$	0.0	OK
3.	BOTTOM - $+4^{\circ}\text{C}$	$+4.3^{\circ}\text{C}$	0.3	OK

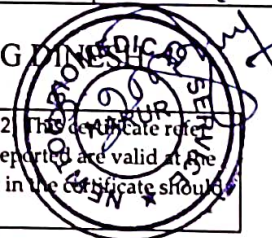
STANDARD INSTRUMENT USED:

Nomenclature:	Digital Thermometer with Sensor(K Type)	Serial no:	S1023388
Make& Model:	KUSAM MECO & KM-945	Code/ID No:	--
Range:	-50°C to 1300°C	Resolution:	1°C

TESTED BY: G.DINESH

APPROVED BY: G.DINESH

NOTE: 1) Calibration Points & due date is given as per customer request 2) This certificate refers only to particular item submitted for certificate 3) The calibration results reported are valid at the time of and under the stated conditions of the measurements 4) Any error in the certificate should be brought to our lab within 45 days from the date of issue of certificate.





CC - 3237

TRACEABILITY COPY



#40, 2nd Floor, 2nd Street,
Padmavathi Nagar, Chromepet
Chennai, Tamil Nadu - 600 04

CALIBRATION CERTIFICATE

MCAL/FOR/QD-12

Page # 1 of 1

PRF #	: MCAL/PRF/0322120	Date of Calibration	: 4-Apr-2022
Certificate #	: MSIR/410322/120-001	Recom. Due Date	: 3-Apr-2023

DETAILS OF USER CUSTOMER		ULR #	: CC323722000005225F
M/S. Newton Bio Medical Service, 27, Pradhkshanam (road), A - Plot, 2nd Floor, Karur - 639 001.		Calibrated at	: Lab
		Date of Receipt	: 4-Apr-2022
		Cond. On Receipt	: Satisfactory
		Date of Issue	: 25-Apr-2022

DETAILS OF TEST / UNIT UNDER CALIBRATION			
Description	: Digital Thermometer	Identification #	: --
Range	: -50 to 1200 °C	Serial #	: S102388
Cal. / Working Range	: --	Make	: KUSAM - MECO
Least Count	: 0.1 °C	Model # / Type	: KM - 945
Location	: --	Accuracy	: --

DETAILS OF MASTER INSTRUMENT USED			
Description (Range)	Identification #	Valid upto (Due Date)	Traceability Certificate #
Digital Thermometer	MCAL/INS/TH-44	5-Dec-2022	MSIR/411221/06-004
RTD "1/10Din" (-80 to 250)	MCAL/INS/TH-02	20-Jul-2022	JRPM-CCTR-THER-2021-0705
TC "N-Type" (50 to 1200°C)	MCAL/INS/TH-19	5-May-2022	MSIR/410521/17-013

MFC #	: MCAL/MFC/TH-02		
Details of Env.	: Temperature : 25±2°C	Relative Humidity	: 40-70 % RH

CALIBRATION RESULTS				
<i>Parameter : Thermal</i>				
Sl. #	Test Readings (°C)	Standard Readings (°C)	Error (°C)	Uncertainty ± (°C)
1.	100.2	99.97	0.23	0.50
2.	300.3	299.92	0.38	4.51
3.	500.4	499.84	0.56	4.51
4.	1000.5	999.75	0.75	4.51
5.	1200.6	1199.70	0.90	4.51

Remarks

1. The reported Expanded Uncertainty is calculated at 95.45 % C.L with coverage factor k=2.
2. The reported readings are average of three readings.
3. Temperature Scale : ITS-90 Chart.

Issued by :	<u>B.A.</u>	Authorised by :	<u>V.K.</u>
MCAL - Engineer	SANGEETHA. B	Technical Manager	KAMALANATHAN V

*** End of Certificate ***

MSIR INDIA PRIVATE LIMITED

(The Madras Science and Industrial Resources)

Phone : 044 2265 2634, +91 9789877567, Email: calibration@msirindia.com Web: www.msirindia.com

