

**MEASURE TECHNO LAB**2, B.T. ROAD (JAYANTI CINEMA COMPLEX), BARRACKPORE,
KOLKATA - 700120, W.B.

CC - 2545

Phone : 033 - 2215 - 0032, 2215 - 9687, 8100875519, Mobile: 9831190974,
LAB:- 8100143376, E-mail: measuretechno@yahoo.co.in**CALIBRATION CERTIFICATE OF GC - MS - OVEN**

CALIBRATION CERTIFICATE NO.: MTL / CPCE / TOL / R04 / 07 - 23

ULR - CC254523000021612F

Page: 1 of 1

1.0 Service Request No.: MTL / 24B / 07 / 23 - 24

1.1 Issued to: M/s. Central Pollution Control Board,
Parivesh Bhawan, East Arjun Nagar,
Delhi - 110032.

1.2 Description & Identification of item to be Calibrated:	a) Name:	GC - MS - Oven	b) Code No.:	TOL / GC - MS / 03
	c) SI No.:	680515050705	d) Make:	Perkinelmer
	e) Model / Type:	CLARUS 680	f) Range:	As Per Report
	g) Sensor:	N.A.	h) Resolution:	1 °C
	i) End User:	Trace Organic Lab	j) Accuracy:	N.S.
	k) Calibration done at:	√ On Site / In House		

1.3 Date of receipt of item :	24-07-23	1.4 Physical Condition of DUC :	OK
1.5 Date of calibration :	24-07-23	1.6 Recommended date of next calibration :	24-07-24

1.8 Environmental Conditions During Calibration: Temperature: 25.3 °C
Humidity: 65.5 % RH

1.9 Method of Calibration: SOP / TH / 05

2.0 Traceability :

a) Standards used for calibration are traceable to National standards through NABL Accredited Laboratory.

b) The following standards / Equipment have been used.

- i) Data Acquisition Switch Unit Cal. Certificate No. JRPm - CCTR - ET - 2022 - 1498 (JRPm, Chennai) (Cal. Date: 25/08/22, Due Date: 24/08/23)
- ii) RTD (PT - 100) Cal. Certificate No. TL / 022 / 1166.2.1 (TEMSENS, Udaipur) (Cal. Date: 19/10/22, Due Date: 18/10/23)

2.1 Result :

Thermal Calibration (Temperature)

Sl. No.	Parameter/ Range	Temperature Set at °C	Measured Value on DUC			Corrected Std. Value					Error °C	Zone	Measurement Expanded Uncertainty ± °C
			Min. °C	Max. °C	Average °C	Min. Ohms	Min. °C	Max. Ohms	Max. °C	Average °C			
1.	Temperature	50	50	50	50.0	119.44	50.10	119.46	50.16	50.143	-0.143	LS	0.68
						119.46	50.16	119.48	50.21	50.200	-0.200	RS	0.68
2.	Temperature	100	100	100	100.0	138.59	100.23	138.62	100.29	100.275	-0.275	LS	0.68
						138.60	100.26	138.63	100.32	100.301	-0.301	RS	0.68
3.	Temperature	150	150	150	150.0	157.44	150.31	157.47	150.39	150.366	-0.366	LS	0.68
						157.46	150.35	157.50	150.46	150.418	-0.418	RS	0.68
4.	Temperature	250	250	250	250.0	194.26	250.44	194.28	250.51	250.490	-0.490	LS	0.68
						194.28	250.49	194.31	250.58	250.549	-0.549	RS	0.68
5.	Temperature	290	290	290	290.0	208.67	290.51	208.71	290.63	290.586	-0.586	LS	0.68
						208.68	290.56	208.80	290.88	290.734	-0.734	RS	0.68

Remarks: i) This result has an expanded uncertainty with a coverage factor k=2 at approximately 95% confidence level.

ii) The calibration certificate issued for this instrument is to be used for scientific or industrial purposes only.

iii) Average Reading obtained by 10 Readings.

iv) Error = Average DUC Reading - Average Standard Reading.

v) Calibrations are carried out without any adjustment or repair.

DUC - Device Under Calibration N.S. - Not Specified N.A. - Not Applicable Std. - Standard Min. - Minimum
 Max. - Maximum LS - Left Side RS - Right Side

Opinions and Interpretations

Calibrated	√	Accepted / Valid for use
Limited Use		Rejected / Out of use

Calibrated by:

J. Dey
J. Dey

Calibration Engineer

Calibration Engineer

Checked / Approved by:

S. Pandey
Quality & Technical Manager

Form No. MTL/22/2006 Issue No. 2 Issue Date : 10.11.06

Rev. No. : 04 Rev. Date : 01.04.22

Kolkata

S. Pandey