

ULR Number	CC242824000015085F	Certificate Number	RPL-CF-2024-MASS-CSRF-1262-C-0124
Date of Calibration	26.12.2024	Recommended due date	25.12.2025

Mechanical-Weighing Scale and Balance

Calibration Certificate

For

Electronic Weighing Balance

Laboratory certifies that the equipment has been calibrated in accordance with a quality system registered to ISO 9001:2015 and confirms to ISO/IEC 17025:2017 and laboratory applicable procedures.

The measurement expanded uncertainty is expressed at 95% confidence level with a coverage factor equal to two ($k=2$).

Laboratory measurement standards are traceable through unbroken chain of comparison to National and / or to International Standards.

Calibration of all equipment, meters used are traceable to National Standards / International Standards and their calibration are current.

This calibration report contains the results of calibration and / or other relevant data about the calibration.

This report applies only to the item identified and shall not be reproduced except in full, without specific written approval from the Laboratory.

No statement of compliance with specifications is made or implied on this report. However, the results are reviewed to establish where any measurement results exceed the manufacturers specification and communicate results by means of this report.



Lab QR Code



Certificate QR Code

Calibration Procedure	As Received Conditions	As Shipped Condition
RPL-L03-DI-025-MASS-002	Satisfactory	Cleaned & Calibrated

Calibrated By		Reviewed & Approved By Authorized Signatory	
Identification	RPL-TM-02	Identification	Jayasree Manikandan



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Date of Performance of Calibration	26.12.2024	Date of Issue	01.01.2025
		Recommended Due Date	25.12.2025

Name & Contact information of Customer:	Kothari Petrochemicals Limited 1/2B, 33/5, Sathangadu Village, Manali, Chennai - 600068.	Date of Receipt	26.12.2024
		CSRF Number	RPL/SRF/2024/1262
		Location-Calibrated at	Onsite

Description of the Unit Under Calibration (UUC)

Description	Weighing Balance	Model	AG 204
Range	1 mg to 210 g	Serial No	143483864
Least Count	0.0001 g	Identification No	PLI/ALB/01
Make	Mettler Toledo	Accuracy	-
Location	Instrument lab	Operating Range	1 mg to 210 g

Condition of unit under calibration on receipt	Satisfactory
Method used - Reva Phoenix Document Number	RPL-L03-DI-025-MASS-002
Reference Standard (International / National)	OIML-R-76-1

Environmental Details	Temperature	Start	25.3 °C	End	25.3 °C	Difference	0.2 °C
	Relative Humidity		58 %RH		59 %RH		1.0 %RH

Details of Traceability - Master Equipment / Standard used for Calibration

Sl. No.	Description Master Equipment / Standard used for calibration	Metrological Traceability to National / International Standards
1	Weight Box	CC-2231,TSC/22-23/9683-1 Valid till 22.09.2027

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Discipline : Mechanical-Weighing Scale and Balance

Linearity Test

Sr.No.	Applied Mass	Actual/Conventional Mass Value	Test Reading	Error	Expanded Uncertainty ($\pm$)
	g	g	g	g	g
1	0.0010	0.001000	0.0010	0.0000	0.000577
2	0.0020	0.002000	0.0020	0.0000	0.000577
3	0.0050	0.004999	0.0050	0.0000	0.000577
4	0.0100	0.010000	0.0100	0.0000	0.000577
5	0.0500	0.050002	0.0500	0.0000	0.000577
6	0.1000	0.100000	0.1000	0.0000	0.000577
7	0.5000	0.500006	0.5000	0.0000	0.000577
8	1.0000	1.000005	1.0000	0.0000	0.000577
9	2.0000	2.000008	2.0001	0.0001	0.000581
10	5.0000	5.000008	5.0001	0.0001	0.000581
11	10.0000	10.000015	10.0002	0.0002	0.000591
12	50.0000	50.000020	50.0003	0.0003	0.000608
13	100.0000	100.000010	100.0003	0.0003	0.000610
14	200.0000	199.999990	200.0004	0.0004	0.000631
15	210.0000	210.000005	210.0004	0.0004	0.000631

Repeatability

Sr.No.	Zero	At Approx. 50% of Range	At Approx. 100% of Range
	g	g	g
1	0.0000	100.0003	200.0004
2	0.0000	100.0003	200.0004
3	0.0000	100.0003	200.0004
4	0.0000	100.0004	200.0004

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Sr.No.	Zero	At Approx. 50% of Range	At Approx.100% of Range
5	0.0000	100.0004	200.0004
6	0.0000	100.0003	200.0004
7	0.0000	100.0003	200.0004
8	0.0000	100.0004	200.0004
9	0.0000	100.0003	200.0004
10	0.0000	100.0003	200.0004

Eccentricity Test

Sr.No.	Position of Weights	Test Reading
	g	g
1	1	50.0003
2	2	50.0003
3	3	50.0003
4	4	50.0002
5	5	50.0003
6	1	50.0003
7	5	50.0002
8	4	50.0003
9	3	50.0003
10	2	50.0003
11	1	50.0003

*

	g	g	g	g	
1	Repeatability at maximum load	0.00000	Eccentricity Error	0.00010	
2	Repeatability at minimum load	0.00005	Expanded Uncertainty ± :	0.00063	

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Mandatory Annexure to Calibration Certificate

- Calibration Certificate includes all the information as agreed with Customer and as necessary for the interpretation of the results and all information required by the method used, including, additions to deviations, or exclusions.
- All issued reports are retained as technical records by our Laboratory as per ISO/IEC 17025: 2017 requirements.
- Metrological traceability to National | International Standards as per ISO/IEC 17025: 2017 requirements is and Calibration reports do not contain any recommendation on Calibration interval, except where agreed.
- Laboratory is responsible for all the information provided in the report, except when information is provided by the customer. Data provided, where applicable, is clearly identified, as they can affect the validity of results.
- Measurement Uncertainty reported is at approximately 95% confidence level with $k=2$; Unit of measurement result and measurement uncertainty are same as that of range selected, unless otherwise indicated in certificate.
- Calibration Certificate is issued in accordance with the terms and conditions laid down by NABL which has assessed our measurement capability and its traceability to recognized National | International standards.
- Metrological traceability of Masters to National / International Standard is established by unbroken chain of calibration.
- Calibration Certificate pertains only to the particular item(s) submitted and reported for calibration and shall not be reproduced except in full, without the written approval from our Laboratory.
- Results reported in Calibration Certificate are valid at the time of and stated conditions of measurement of UUC.
- Error(s), if any, in the Calibration Certificate, shall be brought to the notice of Laboratory within 30 days from the date of issue. Amendments to Certificate will not be entertained thereafter.
- Calibration Certificate is issued based on Customer requirements for Scientific and Industrial purposes and not meant for other purpose and shall not be produced in the court of law.
- Legal Aspects: Calibration of Weights, Density of solids, Load cell, UTM, Pressure Dead Weight Tester, Pressure Gauge. Liquid-in-glass Thermometer done by our Laboratory is meant for scientific and industrial purpose only. However, if used for commercial trading, additional recognition/ approval shall be complied as required by Department of Legal Metrology, Regulatory body, etc.
- Laboratory is not liable for any change in the reported data and performance specification on account of malfunctioning of Standards | Equipment covered by this Certificate due to damage caused to it after the issue of this Certificate.
- Any corrections | changes | erasing | modifications | unauthorized Seal, Stamp or Signature on this Calibration Certificate invalidate this Certificate.
- Unless otherwise specified, the measurement data reported is considered 'As found data - without any adjustments.'
- Decision Rule: No conformity statement (Pass | Fail | Accepted | Rejected) is provided, unless otherwise indicated on report.
- NABL Guideline 133 is adopted for the use of NABL Symbol.
- This report pertains only to the sample | equipment submitted and shall not be reproduced in part or full, without explicit written permission from our Laboratory.
- Only Digital calibration Certificate in soft, valid and prepared as per ISO/IEC 17025:20217 requirement is issued.
- Please contact our Laboratory to get a copy of our ISO/IEC 17025: 2017 Accredited Certificate and Scope of Calibration. You may also download the same directly from NABL Website.

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For any further information, assistance or feedback; please contact:

Director | Managing Director

Reva Phoenix Labs & Consultants Private Limited

Reva Phoenix Complex, No.14, 4th Street, Rajarajeswari Nagar,

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Our Accredited Calibration Laboratories:

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- Mechanical - Dimension - Precision Instruments
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- Mechanical - Force, Push Pull, UTM, Durometer, Mobile Force Measuring System
- Mechanical - Hardness Testing Machines
- Mechanical - Impact Testing Machine
- Mechanical - Mass & Volume, Weighing Scale & Balance, Weights
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 Calibrator | Torque Sensor Upto 2000 Nm

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- End of Calibration Certificate -

Page No : 06 of 06