sanas
South African National Accreditation System

CERTIFICATE OF ACCREDITATION

In terms of section 22(2) (b) of the Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act, 2006 (Act 19 of 2006), read with sections 23(1), (2) and (3) of the said Act, I hereby certify that:-

SAF LAB (PTY) LTD

Co. Reg. No.: 2018/336515/07

Accreditation Number: **382**

is a South African National Accreditation System Accredited Calibration Laboratory provided that all SANAS conditions and requirements are complied with

This certificate is valid as per the scope as stated in the accompanying scope of accreditation, Annexure "A", bearing the above accreditation number for

TEMPERATURE METROLOGY

The facility is accredited in accordance with the recognised International Standard

ISO/IEC 17025:2017

The accreditation demonstrates technical competency for a defined scope and the operation of a laboratory quality management system

While this certificate remains valid, the Accredited Facility named above is authorised to use the relevant SANAS accreditation symbol to issue facility reports and/or certificates

Mr T Baleni
Acting Chief Executive Officer

Effective Date: 19 May 2023
Certificate Expires: 05 July 2025

ANNEXURE A

SCOPE OF ACCREDITATION

TEMPERATURE METROLOGY

Accreditation Number: 382

Permanent Address of Laboratory:
SAF LAB (Pty) Ltd
Pressure Calibration Laboratory
No. 14 Hopson Avenue
Durban
4001

Postal Address:
P O Box 1167
Westville
3630

Tel: (031) 201-3584
E-mail: miranda@saflab.co.za

Technical Signatory: Ms M Lea

Nominated Representative: Ms M Lea

Issue No. 03
Date of issue: 30 July 2024
Expiry date: 05 July 2025

ITEM	MEASURED QUANTITY OR TYPE OF GAUGE OR INSTRUMENT	RANGE OF MEASURED QUANTITY	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	METHOD / PROCEDURE
1.3	**Thermometers**			
1.3.2	Liquid in Glass Thermometer	- 20 °C to 0 °C 0 °C to 150 °C	1,0 K 0,6 K	Calibration by comparison with a reference thermometer in a bath.
1.3.2	Digital Thermometers	- 30 °C to 20 °C - 20 °C to 0 °C 0 °C to 150 °C 150 °C to 300 °C	0,3 K 0,3 K 0,2 K 0,5 K	
1.3.4	Mechanical Thermometers (Expansion)	- 20 °C to 0 °C 0 °C to 150 °C 150 °C to 300 °C	1,5 K 1,0 K 2,0 K	
1.3.5	Radiation Thermometer	50 °C to 200 °C 200 °C to 450 °C	3,0 K 6,0 K	Calibration using a radiation source and reference thermometer.
1.4	**Reference Temperature Sources**			
1.4.1	Ice Point	0,0 °C	0,1 K	Prepared in a thermally insulated flask using distilled water and ice.
1.5	**Temperature Measuring and Recording**			
1.5.2	Data Loggers	- 10 °C to 60 °C	1,0 K	Calibration in a chamber against a reference thermometer.

Original date of accreditation: 21 December 2021

The CMC, expressed as an expanded uncertainty of measurement, is stated as the standard uncertainty of measurement multiplied by a coverage factor k = 2, corresponding to a confidence level of approximately 95%

Accreditation Manager

ANNEXURE A

Accreditation No.: 382
Date of Issue: 30 July 2024
Expiry Date: 05 July 2025

ITEM	MEASURED QUANTITY OR TYPE OF GAUGE OR INSTRUMENT	RANGE OF MEASURED QUANTITY	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	METHOD / PROCEDURE
4	**TEMPERATURE INSTALLATIONS AND DEVICES**			
4.1	**Iso-thermal Media evaluation (multi location over time monitoring)**			
4.1.2	Environmental Chambers	- 80 °C to - 20 °C - 20 °C to 150 °C 150 °C to 200 °C	2,5 K 0,5 K 2,2 K	Calibration by temperature mapping over time using reference thermometers and/or loggers
4.1.3	Furnaces / Drying Ovens			
4.1.4	Fridges / Freezers			
4.1.5	Incubators			
4.1.6	Liquid Baths			
4.2	**Temperature Installations (single location)**			
4.2.1	Furnaces, Ovens	- 80 °C to - 20 °C - 20 °C to 150 °C 150 °C to 200 °C	2,5 K 0,5 K 2,2 K	By comparison to a reference thermometer located at an appropriate location within the device or installation
4.2.2	Fridges, Freezers			
4.2.3	Incubators			
4.2.4	Liquid baths			
4.2.5	Other Industrial Installations			
5	On-Site calibration of Item 1.3.2 above			

The CMC, expressed as an expanded uncertainty of measurement, is stated as the standard uncertainty of measurement multiplied by a coverage factor k = 2, corresponding to a confidence level of approximately 95%

ISSUED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM

Accreditation Manager