

# **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:-*

## **MONTECH CALIBRATION SERVICES (PTY) LTD**

**Co. Reg. No.: 2014/182132/07**

### **TEMPERATURE CALIBRATION LABORATORY**

Accreditation Number: **371**

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

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**Mr M Phaloane**  
**Acting Chief Executive Officer**

**Effective Date: 15 March 2021**  
**Certificate Expires: 09 March 2026**

## ANNEXURE A

## SCOPE OF ACCREDITATION TEMPERATURE METROLOGY

Accreditation Number: 371

<b>Permanent Address of Laboratory:</b> Montech Calibration Services (Pty) Ltd Temperature Calibration Laboratory 47 Fabriek Street Strydompark Randburg 2169  <b>Postal Address:</b> Postnet Suite 266 Private Bag x21 Bryanston 2021  Tel: (011) 464-5071 Cell 072 779 4076 Fax: 086 767 6091 E-mail: seola@moncal.co.za		<b>Technical Signatory:</b> Mrs S Targett   <b>Nominated Representative:</b> Mrs S Targett   Issue No.: 05 Date of Issue: 15 March 2021 Expiry Date: 09 March 2026		
ITEM	MEASURED QUANTITY OR TYPE OF GAUGE OR INSTRUMENT	RANGE OF MEASURED QUANTITY	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY ( $\pm$ )	METHOD / PROCEDURE
<b>1</b>	<b>THERMOMETRY</b>			
<b>1.1</b>	<b>Thermocouples</b>			
1.1.2	Base Metal	- 20 °C to 100 °C	0,5 K	Calibration by comparison with a reference thermometer in a bath, drywell or furnace.
<b>1.2</b>	<b>Resistance Thermometers</b>			
1.2.1	Platinum Resistance Thermometers (PT100)	- 20 °C to 100 °C 100 °C to 600 °C	0,2 K 0,3 K	Calibration by comparison with a reference thermometer in a bath, drywell or furnace.
<b>1.3</b>	<b>Thermometers</b>			
1.3.1	Liquid-in-glass	- 20 °C to 80 °C 80 °C to 600 °C	0,4 K 0,5 K	Calibration by comparison with a reference thermometer in a bath, drywell or furnace.
1.3.2	Digital Thermometers	- 80 °C to 80 °C 80 °C to 600 °C	0,4 K 0,5 K	
1.3.5	Radiation Thermometers	50 °C to 250 °C 250 °C to 500 °C	1,5 K 2,2 K	Calibration using a radiation source and reference thermometer.

Original Date of Accreditation: 10 March 2016

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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.: 371  
Date of Issue: 15 March 2021  
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1.4	<b>Reference Temperature Sources</b>			
1.4.1	Ice Point Reference	0,00 °C	0,30 K	Prepared in a thermally insulated flask using distilled water and Ice.
1.5	<b>Temperature Measuring &amp; Recording</b>			
1.5.1	Thermo Hygrograph	0 °C to 60 °C	1,0 K	Calibration in chamber against reference thermometer.
1.5.2	Data Loggers	- 80 °C to 60 °C	0,2 K	
3	<b>TEMPERATURE SOURCES</b>			
3.2	<b>Environmental Monitors</b>			
3.2.1	Heat / Cold Stress Monitors (WBGT Monitors)	0 °C to 60 °C	0,4 K	By comparison to a reference thermometer in a chamber or bath.
4	<b>TEMPERATURE INSTALLATIONS AND DEVICES</b>			
4.1	<b>Iso-thermal Media evaluation (multi location over time monitoring)</b>			
4.1.2	Environmental Chambers	- 80 °C to 50 °C	1,0 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	<b>Temperature Installations (single location)</b>			
4.2.1	Furnaces, Ovens	50 °C to 200 °C	2,0 K	By comparison to a reference thermometer located at an appropriate location within the device or installation.
4.2.3	Incubators			
4.2.4	Liquid baths			
4.2.5	Other Industrial Installations			
5	On-site calibration for items 4.1 and 4.2 above			

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ISSUED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM

**Accreditation Manager**