



LEMBAGA GETAH MALAYSIA
MALAYSIAN RUBBER BOARD

RUBBER RESEARCH INSTITUTE OF MALAYSIA

Global Testing and Consultancy for Rubber (G-TACr)

Malaysian Rubber Board, 47000 Sungai Buloh, Selangor.

Phone: 03-61459471/61401735 Email: gtacr@lgm.gov.my

Website: [https://www.lgm.gov.my/webv2/mrbServices/gtacr/\(gtacr:about\)](https://www.lgm.gov.my/webv2/mrbServices/gtacr/(gtacr:about))



Page 1 of 1

CERTIFICATE OF VERIFICATION

ISSUED BY: CALIBRATION LABORATORY,
GLOBAL TESTING AND CONSULTATION FOR RUBBER (G-TACr),
LEMBAGA GETAH MALAYSIA,
JALAN SUNGAI BULOH, SEKSYEN U4,
47000 SUNGAI BULOH,
SELANGOR DARUL EHSAN.

DATE OF ISSUE : 08.09.2023

CERTIFICATE NUMBER : CAL / 2023 / 0184 / 1

Submitted by : PRO LAB ENGINEERING SERVICES SDN. BHD.,
No. 21-G, Jalan Bidara 8,
Saujana Utama 3,
47000 Sungai Buloh,
Selangor.

Date Received : 04.09.2023

Item : Casagrande Apparatus Equipment
Requirement : Verification of based hardness (IRHD)
Manufacturer : -
Model : -
Serial No. : -
Lab. Ref. Number : -

Tested by : Physical Testing Laboratory, G-TACr

Ambient temperature (°C) : 23 ± 2
Relative Humidity (%) : 55 ± 10

Test method : ISO 48-5 : 2018 (IRHD)
Standard Reference (apparatus) : BS 1377 : Part 2 : 1990 Clause 4.5.2.3

Date of test : 07.09.2023
Due date (client requested)* : -

Test Report Ref. No. : CAL / 2023 / 0184 / 1

Note : This certificate valid only with above reference test report

*The user should be aware that any number of factors may cause this instrument to drift out of verification before the specified verification interval has expired.

**The results produced in this certificate just related only to the items tested or verified.

Instrument Used For Verification	Equipment ID	Traceability
IRHD Durometer	ER 21.10	NMIM

Verification Result

Item	Measured (IRHD)	Standard Tolerance (IRHD)
Rubber base	81	-

VERIFIED BY

Mohd Nizam Bin Mansor
Technical Manager
Calibration Laboratory



LEMBAGA GETAH MALAYSIA
MALAYSIAN RUBBER BOARD

RUBBER RESEARCH INSTITUTE OF MALAYSIA

Global Testing and Consultancy for Rubber (G-TAC_R)

Malaysian Rubber Board, 47000 Sungai Buloh, Selangor.

Phone: 03-61459471/61401735 Email: gtacr@lgm.gov.my

Website: [https://www.lgm.gov.my/webv2/mrbServices/gtacr/\(gtacr:about\)](https://www.lgm.gov.my/webv2/mrbServices/gtacr/(gtacr:about))



Page 1 of 1

TEST REPORT

REPORT NO : CAL/2023/0184/1

DATE : 08.09.2023

SAMPLE DESCRIPTION

Sample description : Rubber Product (Casagrande Apparatus - Base)

Marked : -

Test to Standard : ISO 48-5 : 2018

Date of Testing : 07.09.2023

PROPERTY	OBSERVED CAL/2023/0184/1
Hardness , IRHD*	80
	81
	81
	82
	82
Median :	81

* Test On Product Surface (Base).


Shamheza Suhatta
Technical Manager

Physical Testing Laboratory
Global Testing and Consultancy for Rubber (G-TAC_R)

ACCEPTABLE TO USE

Izatul Azira
Lab Manager
Pro Lab Engineering Services Sdn Bhd