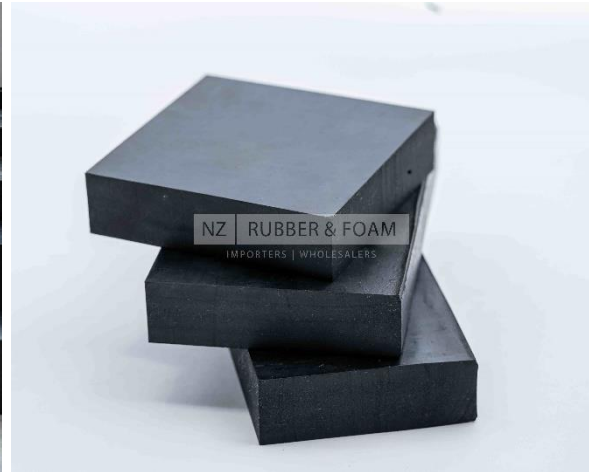


## Neoprene Rubber Blocks



<b>Colour</b>	Black
<b>Hardness</b>	60 +/-5 ShoreA
<b>Tensile Strength</b>	3MPA
<b>Elongation</b>	150% - 200%
<b>Temperature Range</b>	-30°C to 110°C
<b>Surface</b>	Smooth
<b>Density</b>	1.6g/cm <sup>3</sup>

- Good resistance to Grease and Oil
- Good ozone and U.V. resistance
- Suitable for outdoor applications
- Bearing Rubber

### Amended Report / Certificate

This replaces previous Report / Certificate no.:  
 INZ70598-01 dated 10/9/20.

File Ref: INZ 70598

Page 1 of 1

## TEST CERTIFICATE No.: INZ70598-01A

Client: NZ Rubber & Foam Ltd  
 Order No.: 020920  
 Sample Description: Rubber samples as supplied  
 Identification: As listed  
 Material Specification: Natural and Neoprene rubber  
 Tested in accordance with: Client Instruction

Test: The displacement and load of rubber samples supplied (100mm x 100mm x 20mm) was measured as the sample was placed under compression.

Loading rate: 25mm/min

Results:

Sample		Load at displacement		
		5mm	10mm	13mm*
Natural	kN	44.0	163.8	410.2
	kg	4490	16700	41810
Neoprene	kN	26.0	95.3	265.4
	kg	2650	9710	27050

Note:

Natural Rubber test was ended prematurely due to program parameters  
 kN measurements rounded to 1dp. Kg measurements rounded to nearest 10kg

Natural vs Neoprene

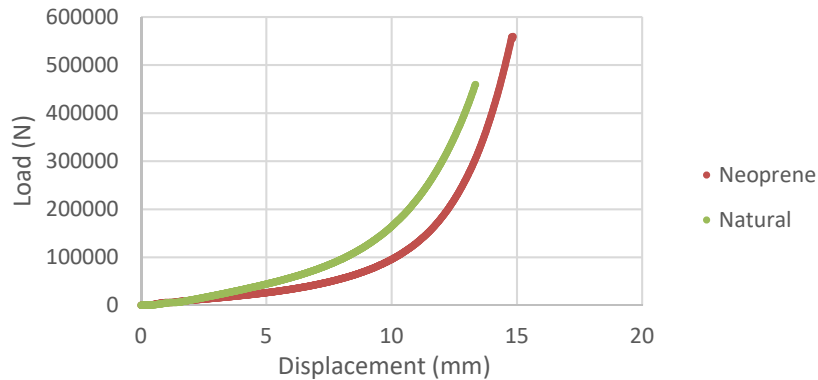


Figure 1: Compression load vs displacement

Acceptance Criteria: Report findings

Tested by: J. McClintock

Reviewed By: Kelvin Chin

Authorised By: Jen Sun Hong

Date: 7-Sep-20

11-Sep-20

*Kelvin Chin*

11-Sep-20

*Jen Sun Hong*

This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

WARNING: The sample(s) to which the findings recorded herein (the "Findings") relate was(were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativeness of any goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted unless otherwise stated the results shown in this test report refer only to the sample(s) tested. Samples will be retained for two (2) weeks after test date before disposal at SGS New Zealand Limited's discretion. Returning of samples to be advised in writing. Storage (when agreed by SGS New Zealand Limited) or return of samples at client's expense.



SGS New Zealand Ltd, NDT & Materials Services  
 22 Vestey Drive, Mt Wellington, PO Box 12 356, Penrose, Auckland  
 Tel: 64 9 634 3637 Fax: 64 9 634 6728  
 Email: NZ\_Industry@sgs.com Web: www.sgs.com

**TEST REPORT No.:** **INZ70598-02** File Ref: INZ 70598  
Page: 1 of 1

<b>Client:</b> NZ Rubber & Foam Ltd <b>Sample Description:</b> Machined Rubber <b>Material Specification:</b> Not supplied <b>Tested in accordance with:</b> ASTM D412 - 2006 <b>Tensile:</b> Type: Reduced section <b>Conditions:</b> a. Temperature: Ambient (23 ± 5°C) b. Strain Rate: Uncontrolled c. L <sub>e</sub> = NA d. Ageing: NA e. Other:	<b>Order No.:</b> TBD <b>Sample Identification:</b> As listed <b>Sample Dimensions:</b> As listed <b>Specimen Axis:</b> Not specified
---	--

Specimen	Dimensions (mm)			Yield Stress (R <sub>eL</sub> ) (MPa)	0.1% Proof Stress (R <sub>p0.1</sub> ) (MPa)	0.2% Proof Stress (R <sub>p0.2</sub> ) (MPa)	Ultimate Tensile Strength (R <sub>m</sub> ) (MPa)	Original Gauge Length (L <sub>o</sub> ) (mm)	Elongation (A) (%)	Reduction of Area (Z) (%)	Comments
	DIAMETER (d)	WIDTH (b)	THICKNESS (a)								
	Natural	20.92	12.15								
Neoprene	19.87	11.69				5					

Specification Requirements:

Acceptance Criteria: Report findings

<b>Tested By:</b> J. McClintock <b>Date:</b> 8-Sep-20	<b>Reviewed By:</b> Alistair Remington 10-Sep-20 <i>Alistair Remington</i>	<b>Authorised By:</b> Jen Sun Hong 10-Sep-20 <i>Jen Sun Hong</i>
--	---	---

This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.  
 WARNING: The sample(s) to which the findings recorded herein (the "Findings") relate was/were drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativeness of any goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. Samples will be retained for two (2) weeks after test date before disposal at SGS New Zealand Limited's discretion. Returning of samples to be advised in writing. Storage (when agreed by SGS New Zealand Limited) or return of samples at client's expense.