

## REPORT OF TESTS

Description	EPDM Rubber		
Tested for	SAUDI RUBBER PRODUCTS FACTORY CO		
Lab Ref. No.	WR25-07137 (Page 1 of 3)	Request No.	D25-16606
Date Received	02.06.2025	Date Reported	11.06.2025

### 1.0 INTRODUCTION

Further to the test work instructions received from Client, dated 02.06.2025, sample of EPDM Rubber provided has been tested for the following by Al Futtam Element Materials Technology Dubai (L.L.C)

- 1.1 Tensile Strength & Elongation
- 1.2 Shore 'A' Hardness
- 1.3 Compression set
- 1.4 Water Absorption

### 2.0 Sample Reference

Sample description	EPDM Rubber
Job No.	K25-14847
AFE Sample No.	D25-16606/1

### 3.0 RESULTS

Results are given on the attached sheet.

**3.1 Tensile Strength & Elongation According to ASTM D412-16 (2021)**

Normal Condition					
Test Reference	Width (mm)	Thickness (mm)	Load (N)	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)
1	6.00	2.44	205	14.0	747
2	6.00	2.55	257	16.8	695
3	6.00	2.54	183	12.0	652
4	6.00	2.35	235	16.7	662
5	6.00	2.29	175	12.7	683
<b>Tensile Strength &amp; Elongation (Median Value)</b>				<b>14.4</b>	<b>688</b>

After Heat Ageing @70°C @ 96hours					
Test Reference	Width (mm)	Thickness (mm)	Load (N)	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)
1	6.00	2.71	202	12.4	610
2	6.00	2.69	192	11.9	630
3	6.00	2.60	189	12.1	646
4	6.00	2.62	197	12.5	647
5	6.00	2.65	198	12.5	690
<b>Tensile Strength &amp; Elongation (Median Value)</b>				<b>12.3</b>	<b>645</b>

**3.2 Shore 'A' Hardness According to ASTM 2240 - 15**

Normal Condition		
Test Ref.	Results	Average
Shore 'A' Hardness	55, 57, 56, 56, 55	A/56/1

After Heat Ageing @70°C @ 96hours		
Test Ref.	Results	Average
Shore 'A' Hardness	56, 56, 57, 56, 57	A/56/1

Low Temperature @-10°C @ 22hours		
Test Ref.	Results	Average
Shore 'A' Hardness	51, 52, 51, 51, 51	A/51/1

**3.3 Compression Set According to ASTM D395-18 (Method B)**

Test specimens were placed between the plates of the compression device with spacer on each side and compressed approximately 25% of the thickness. Then assembled compression device placed in the cool chamber at 70.0°C @ 22hours.

Test Ref.	Diameter (mm)	Original Thickness (mm)	Thickness after removal (mm)	Spacers Thickness (mm)	Compression Set (%)
1	29.1	12.638	12.384	9.53	8.2
2	29.1	12.884	12.636	9.53	7.4
3	29.1	12.682	12.431	9.53	8.0
<b>Average</b>					<b>7.9</b>

**3.4 Water Absorption According to ASTM D471 – 16 (2021)**

Test	Results (%)
Water Absorption (70°C for 48 hours)	0.63

End of the Report

Zaher Ahmad  
Lab Manager Site

For and on behalf of Al Futtaim Element Materials Technology Dubai (L.L.C)  
Tested by: SSK, Date tested: 05.06.2025 - 11.06.2025.

## REPORT OF TESTS

Description	SBR Rubber		
Tested for	SAUDI RUBBER PRODUCTS FACTORY CO		
Lab Ref. No.	WR25-07138 (Page 1 of 3)	Request No.	D25-16606
Date Received	02.06.2025	Date Reported	11.06.2025

### 1.0 INTRODUCTION

Further to the test work instructions received from Client, dated 02.06.2025, sample of SBR Rubber provided has been tested for the following by Al Futtaim Element Materials Technology Dubai (L.L.C)

- 1.1 Tensile Strength & Elongation
- 1.2 Shore 'A' Hardness
- 1.3 Compression set
- 1.4 Water Absorption

### 2.0 Sample Reference

Sample description	SBR Rubber
Job No.	K25-14847
AFE Sample No.	D25-16606/2

### 3.0 RESULTS

Results are given on the attached sheet.

**3.1 Tensile Strength & Elongation According to ASTM D412-16 (2021)**

Normal Condition					
Test Reference	Width (mm)	Thickness (mm)	Load (N)	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)
1	6.00	2.61	266	17.0	471
2	6.00	2.69	237	14.7	491
3	6.00	2.75	267	16.2	578
4	6.00	2.68	251	15.6	633
5	6.00	2.63	228	14.4	522
<b>Tensile Strength &amp; Elongation (Median Value)</b>				<b>15.6</b>	<b>539</b>

After Heat Ageing @70°C @ 96hours					
Test Reference	Width (mm)	Thickness (mm)	Load (N)	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)
1	6.00	2.48	205	13.8	426
2	6.00	2.60	209	13.4	430
3	6.00	2.62	215	13.7	450
4	6.00	2.80	218	13.0	440
5	6.00	2.78	224	13.4	460
<b>Tensile Strength &amp; Elongation (Median Value)</b>				<b>13.5</b>	<b>441</b>

**3.2 Shore 'A' Hardness According to ASTM 2240 – 15**

Normal Condition		
Test Ref.	Results	Average
Shore 'A' Hardness	57, 58, 56, 57, 57	A/57/1

After Heat Ageing @70°C @ 96hours		
Test Ref.	Results	Average
Shore 'A' Hardness	58, 58, 57, 56, 57	A/57/1

Low Temperature @-10°C @ 22hours		
Test Ref.	Results	Average
Shore 'A' Hardness	55, 54, 53, 54, 55	A/54/1

**3.3 Compression Set According to ASTM D395-18 (Method B)**

Test specimens were placed between the plates of the compression device with spacer on each side and compressed approximately 25% of the thickness. Then assembled compression device placed in the cool chamber at 70.0°C @ 22hours.

Test Ref.	Diameter (mm)	Original Thickness (mm)	Thickness after removal (mm)	Spacers Thickness (mm)	Compression Set (%)
1	29.1	13.944	13.686	9.53	5.8
2	29.1	14.202	13.942	9.53	5.6
3	29.1	12.708	12.447	9.53	8.2
<b>Average</b>					<b>6.5</b>

**3.4 Water Absorption According to ASTM D471 – 16 (2021)**

Test	Results (%)
Water Absorption (70°C for 48 hours)	0.82

End of the Report

  
**Zaher Ahmad**  
 Lab Manager Site

For and on behalf of Al Futtaim Element Materials Technology Dubai (L.L.C)  
 Tested by: SSK, Date tested: 05.06.2025 - 11.06.2025.