

Technical data sheet in accordance with ASTM

# Material

## NBR NB707101

black

cross linking: sulfur

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### Physical properties

	nominal range	typical values	
<b>Density</b> ASTM D 1817	1.23 ±0.03	1.23	g/cm <sup>3</sup>
<b>Hardness</b> ASTM D2240, Shore A	70 ±5	72	Shore
<b>Tensile strength</b> ASTM D412	> 14	17.3	MPa
<b>Elongation at break</b> ASTM D412	> 250	332	%
<b>Modulus</b> 100 %, ASTM D412	---	5.5	MPa
<b>Low temperature test</b> ASTM D1329, TR10	---	-27.3	°C
<b>Low-temperature resistance</b> ASTM D 2137, 3 min, Method A, Nonbrittle; pass	---	-30	
<b>Compression set</b> ASTM D395, Slab B, 22 h, 100 °C, button	---	8	%
<b>Temperature range</b>	-30°C to 100°C		

### Declarations of conformity

This overview is purely informative and does not constitute a declaration of conformity (DoC). Please refer to the actual declaration of conformity (DoC) including the conditions and its validity period.

	Country	Part	Remark	Expires
ADI Free			see certificate	see DoC
Info ROHS and ELV			EU 2000/53 (ELV) including EU 2011/65 and EU2015/863 (ROHS III)	see DoC

### Freudenberg

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### Change after aging in Air: 70h/100°C

Hardness (ASTM D573, Shore A)  
Tensile strength (ASTM D573)  
Elongation at break (ASTM D573)  
volume change (ASTM D573)

Shore  
MPa  
%  
%

Typ. values			
Base value	After aging	difference	
72	73.2	1	
17.3	18.2	5 %	
332	342	3 %	
	-0.3		

### Change after aging in Fuel A: 70h/23°C

Hardness (ASTM D471, Shore A)  
Tensile strength (ASTM D471)  
Elongation at break (ASTM D471)  
volume change (ASTM D471)

Shore  
MPa  
%  
%

Typ. values			
Base value	After aging	difference	
72	70.2	-2	
17.3	17.1	-1 %	
332	335.3	1 %	
	1.3		

### Change after aging in Fuel B: 70h/23°C

Hardness (ASTM D471, Shore A)  
Tensile strength (ASTM D471)  
Elongation at break (ASTM D471)  
volume change (ASTM D471)

Shore  
MPa  
%  
%

Typ. values			
Base value	After aging	difference	
72	52.7	-19	
17.3	12.3	-29 %	
332	232.4	-30 %	
	25.5		

### Change after aging in IRM 901: 70h/100°C

Hardness (ASTM D471, Shore A)  
Tensile strength (ASTM D471)  
Elongation at break (ASTM D471)  
volume change (ASTM D471)

Shore  
MPa  
%  
%

Typ. values			
Base value	After aging	difference	
72	80	8	
17.3	19.2	11 %	
332	341.9	3 %	
	-8.6		

### Change after aging in IRM 903: 70h/100°C

Hardness (ASTM D471, Shore A)  
Tensile strength (ASTM D471)  
Elongation at break (ASTM D471)  
volume change (ASTM D471)

Shore  
MPa  
%  
%

Typ. values			
Base value	After aging	difference	
72	71.3	-1	
17.3	18.5	7 %	
332	335.3	1 %	
	2		

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### Change after aging in Water: 70h/100°C

#### Typ. values

Hardness (ASTM D471, Shore A)  
Tensile strength (ASTM D471)  
Elongation at break (ASTM D471)  
volume change (ASTM D471)

Shore  
MPa  
%  
%

Base value	After aging	difference
72	65.7	-6
17.3	18	4 %
332	328.7	-1 %
	6.4	

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### **No ASTM D2000 properties available**

The given values are based on a limited number of tests on standard test pieces (2mm sheets). The data from finished parts can deviate from above values depending on the manufacturing process and the component geometry.

The data represents our present empirical values. It is incumbent on the person placing the order to examine whether it is suitable for its intended purpose, before using the product. All questions regarding the guarantee of this product are in line with our terms and conditions, inasmuch as statutory provisions do not plan for something else.

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