

Technical data sheet in accordance with ASTM

# Material

## NBR NB901803

black

cross linking: sulfur

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3	2/19/2020		

Physical properties	nominal range	typical values	
<b>Density</b> CNS 5341-96, Method A	1.37 ±0.03	1.35	g/cm <sup>3</sup>
<b>Hardness</b> ASTM D2240, Shore A, 23 °C	85 ±5	86	Shore
<b>Tensile strength</b> ASTM D412	---	17.7	MPa
<b>Elongation at Break</b> ASTM D412	---	169	%
<b>Modulus</b> 100 %, ASTM D412	---	12.3	MPa
<b>Compression set</b> ASTM D 395, B, 22 h, 100 °C, 25 %	---	8	%
<b>Compression set</b> ISO 815, 72 h, 0 °C, 25 %	---	3.1	%
<b>Compression set</b> ISO 815, 168 h, 100 °C, 25 %	---	26.2	%
<b>Low temperature test</b> ASTM D1329, TR10	---	-28.8	°C
<b>Ozone Resistance</b> ISO 1431, 30 °C, 24 h, 50 pphm	---	0	Rating

### Declarations of conformity

	Country	Part	Remark	Expires	unlimited
DVGW Baumusterprüfzertifikat Gas	D		DIN EN 549 H3 B1	11 / 2021	<input type="checkbox"/>
DVGW Baumusterprüfzertifikat Gas	D		DIN EN 549 H3 B1	11 / 2026	<input type="checkbox"/>
DVGW Baumusterprüfzertifikat Gas (en)	D		DIN EN 549 H3 B1	11 / 2021	<input type="checkbox"/>
DVGW type examination	D		DIN EN 549 H3 B1	11 / 2026	<input type="checkbox"/>

### Freudenberg

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### Change after aging in IRM 901: 70h/150°C

Hardness (ASTM D2240, Shore A)  
 Tensile strength (ASTM D412)  
 Elongation at Break (ASTM D412)  
 volume change (ASTM D471)

	Shore	MPa	%	%
Typ. values	86	17.7	169	-2
Base value	90	17.5	105	
After aging	90	17.5	105	
difference	4	-1 %	-38 %	

### Change after aging in IRM 903: 70h/150°C

Hardness (ASTM D2240, Shore A)  
 Tensile strength (ASTM D412)  
 Elongation at Break (ASTM D412)  
 volume change (ASTM D471)

	Shore	MPa	%	%
Typ. values	86	17.7	169	9.7
Base value	80	12	111	
After aging	80	12	111	
difference	-6	-32 %	-34 %	

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

Hardness (ASTM D2240, Shore A)  
 Tensile strength (ASTM D412)  
 Elongation at Break (ASTM D412)  
 volume change (ASTM D471)

	Shore	MPa	%	%
Typ. values	90	17.7	170	2.7
Base value	90	19.5	170	
After aging	90	19.5	170	
difference	0	10 %	0 %	

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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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