

Technical data sheet in accordance with ASTM

# Material

## NBR NB603410

black

cross linking: sulfur

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Physical properties	nominal range	typical values	
<b>Density</b> ASTM D 1817, 23 °C	1.23 ±0.02	1.23	g/cm <sup>3</sup>
<b>Hardness</b> ASTM D2240, Shore A, 23 °C	60 ±5	60	Shore
<b>Tensile strength</b> ASTM D412	---	11	MPa
<b>Elongation at Break</b> ASTM D412	---	371	%
<b>Low temperature test</b> ASTM D1329, TR10	---	-34.5	°C
<b>Surface resistivity</b> ICE 93, 23 °C	---	4.6e+008	Ohm
<b>Compression set</b> ASTM D395, B, 22 h, 100 °C, 25 %	---	6	%
<b>Ozone Resistance</b> 40 °C, 72 h, 50 pphm, 20% Elongation	---	0	Rating
<b>Low-temperature resistance</b> ASTM D 2137, 3 min, pass	---	-40	
<b>Temperature range</b>	-40°C to 100°C		

### Declarations of conformity

	Country	Part	Remark	Expires	unlimited
RoHS conform			including EU 2011/65 and EU2015/863 (ROHS III)		<input checked="" type="checkbox"/>

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

		Typ. values		
		Base value	After aging	difference
Hardness (ASTM D2240, Shore A, 23 °C)	Shore	60	71	11
Tensile strength (ASTM D412)	MPa	11	13.1	19 %
Elongation at Break (ASTM D412)	%	371	311.6	-16 %
volume change (ASTM D471)	%			

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#### Change after aging in ASTM-Oil No. 1: 70h/100°C

Hardness (ASTM D2240, Shore A, 23 °C)  
 Tensile strength (ASTM D412)  
 Elongation at Break (ASTM D412)  
 volume change (ASTM D471)

Shore  
 MPa  
 %  
 %

Typ. values			
Base value	After aging	difference	
60	67	7	
11	13.2	20 %	
371	296.8	-20 %	
		-7	

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

Hardness (ASTM D2240, Shore A, 23 °C)  
 Tensile strength (ASTM D412)  
 Elongation at Break (ASTM D412)  
 volume change (ASTM D471)

Shore  
 MPa  
 %  
 %

Typ. values			
Base value	After aging	difference	
60	63	3	
11	11.9	8 %	
371	293.1	-21 %	
		1	

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

Hardness (ASTM D2240, Shore A, 23 °C)  
 Tensile strength (ASTM D412)  
 Elongation at Break (ASTM D412)  
 volume change (ASTM D471)

Shore  
 MPa  
 %  
 %

Typ. values			
Base value	After aging	difference	
60	58	-2	
11	10.9	-1 %	
371	326.5	-12 %	
		3	

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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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