

Technical data sheet in accordance with ASTM

Material

NBR NB903903

black

cross linking: sulfur

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Physical properties

	nominal range	typical values	
Density ASTM D 297	1.32 ±0.03	1.32	g/cm ³
Hardness ASTM D 2240, Shore A	90 ±5	87	Shore
Tensile strength ASTM D 412	---	17.5	MPa
Elongation at break ASTM D 412	---	160	%
Low temperature test ASTM D 1329, TR10	---	-22	°C
Low Temperature resistance ASTM D2137, Brittleness	---	-20	°C
Compression set ASTM D 395, Slab B, 22 h, 100 °C	---	13	%
Compression set ASTM D 395, Slab B, 70 h, 100 °C	---	21	%
Temperature range	-25°C to 110°C		short term: 120°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
Info ROHS and ELV			EU 2000/53 (ELV) including EU 2011/65 and EU2015/863 (ROHS III)	see DoC

Change after aging in Air: 70h/100°C

		Typ. values		
		Base value	After aging	difference
Hardness (ASTM D573, Shore A)	Shore	87	91	4
Tensile strength (ASTM D573)	MPa	17.5	19.3	10 %
Elongation at break (ASTM D573)	%	160	116.8	-27 %

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Change after aging in Air: 168h/100°C

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

Shore
MPa
%

Typ. values			
Base value	After aging	difference	
87	95	8	
17.5	18.9	8 %	
160	107.2	-33 %	

Change after aging in ASTM-Oil No. 1: 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	
87	91	4	
17.5	19.3	10 %	
160	112	-30 %	
	-8		

Change after aging in ASTM-Oil No. 3: 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	
87	84	-3	
17.5	16.3	-7 %	
160	131.2	-18 %	
	5		

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	
87	87	0	
17.5	16.1	-8 %	
160	140.8	-12 %	
	0		

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	
87	73	-14	
17.5	11.2	-36 %	
160	97.6	-39 %	
	24		

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Change after aging in IRM 902: 168h/80°C

Hardness (ISO 1817, Shore A)
 volume change (ISO 1817)
 weight change

Shore
 %
 %

Typ. values		
Base value	After aging	difference
87	86	-1
	1	
	-1	

Change after aging in Water: 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
87	85	-2
17.5	17.1	-2 %
160	120	-25 %
	5	

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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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