

Technical data sheet in accordance with ASTM

Material

NBR NB70A501

black

cross linking: sulfur

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Physical properties	nominal range	typical values	
Density ASTM D297, 23 °C	1.27 ±0.03	1.27	g/cm ³
Hardness ASTM D2240, Shore A, 23 °C	70 ±5	70	Shore
Tensile strength ASTM D412, 23 °C	---	16	MPa
Elongation at break ASTM D412, 23 °C	---	356	%
Tear strength ASTM D624 C, 23 °C	---	51	KN/m
Low temperature test ASTM D1329, TR10	---	-28	°C
Low temperature test ASTM D1329, TR30	---	-22	°C
Low temperature test ASTM D1329, TR50	---	-17	°C
Low-temperature resistance ASTM D 746, brittleness point	---	-23	
Compression set ASTM D395 B, 70 h, 100 °C, 25 %	---	18.5	%
Temperature range	-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
Info ROHS and ELV		EU 2000/53 (ELV) including EU 2011/65 and EU2015/863 (ROHS III)	see DoC

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Change after aging in Air: 70h/100°C

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

Shore
 MPa
 %
 %

Typ. values			
Base value	After aging	difference	
70	72	2	
16	18.5	16 %	
356	302	-15 %	
	-2		

Change after aging in Air: 168h/100°C

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

Shore
 MPa
 %
 %

Typ. values			
Base value	After aging	difference	
70	75	5	
16	19.4	21 %	
356	284	-20 %	
	-2.5		

Change after aging in Air: 70h/125°C

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

Shore
 MPa
 %
 %

Typ. values			
Base value	After aging	difference	
70	78	8	
16	20.7	29 %	
356	228	-36 %	
	-3.9		

Change after aging in ASTM-Oil No. 1: 70h/150°C

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

Shore
 MPa
 %
 %

Typ. values			
Base value	After aging	difference	
70	75	5	
16	19.4	21 %	
356	306	-14 %	
	-5.1		

Change after aging in ASTM-Oil No. 3: 70h/100°C

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

Shore
 MPa
 %
 %

Typ. values			
Base value	After aging	difference	
70	65	-5	
16	17	6 %	
356	349	-2 %	
	6.1		

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Change after aging in ASTM-Oil No. 3: 70h/150°C

Typ. values

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

Shore
MPa
%
%

Base value	After aging	difference
70	66	-4
16	18.6	16 %
356	337	-5 %
	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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