

Technical data sheet in accordance with ASTM

Material

NBR NB603412

black

cross linking: sulfur

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Physical properties	nominal range	typical values	
Density ASTM D297	1.23 ±0.02	1.23	g/cm ³
Hardness ASTM D2240, Shore A	60 ±5	58	Shore
Tensile strength ASTM D412, C	---	14.2	MPa
Elongation at break ASTM D412, C	---	482	%
Ozone Resistance ASTM D1171, 40 °C, 72 h, 50 pphm, 20% (no crack)	---	0	Rating
Compression set ASTM D395, 22 h, 100 °C	---	8	%
Temperature range	-40°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

Change after aging in Air: 70h/100°C

		Typ. values		
		Base value	After aging	difference
Hardness (ASTM D2240, Shore A)	Shore	58	68	10
Tensile strength (ASTM D412)	MPa	14.2	15.2	7 %
Elongation at break (ASTM D412)	%	482	371.1	-23 %

Freudenberg

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

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

	Shore	MPa	%	%
Base value	58	14.2	482	
After aging	60	13.3	457.9	-1
difference	2	-6 %	-5 %	

Typ. values

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

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

	Shore	MPa	%	%
Base value	58	14.2	482	
After aging	52	8.2	308.5	11
difference	-6	-42 %	-36 %	

Typ. values

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

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

	Shore	MPa	%	%
Base value	58	14.2	482	
After aging	65	15.9	380.8	-10
difference	7	12 %	-21 %	

Typ. values

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

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

	Shore	MPa	%	%
Base value	58	14.2	482	
After aging	59	13.9	385.6	1
difference	1	-2 %	-20 %	

Typ. values

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	%	%
Base value	58	14.2	482	
After aging	58	12.3	366.3	4
difference	0	-13 %	-24 %	

Typ. values

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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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