

Material

NBR NB703904

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Physical properties

	nominal range	typical values	
Density ISO 2781 A	1.24 ±0.03	1.24	g/cm ³
Hardness ASTM D2240, Shore A	70 ±5	70	Shore
Tensile strength ISO 37	---	16.5	MPa
Elongation at break ISO 37	---	350	%
Tear strength ISO 34-1 C	---	70	KN/m
Tear strength ISO 34-1 B	---	20	KN/m
Tear strength ISO 34-1 A	---	7	KN/m
Low temperature test ISO 2921, TR10	---	-25	°C
Compression set ISO 815, Slab A, 22 h, 100 °C	---	10	%
Compression set ISO 815, Slab A, 70 h, 100 °C	---	15	%
Compression set ISO 815, Slab A, 22 h, 125 °C	---	20	%
Temperature range	-35°C to 110°C short term: 130°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	see DoC

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Country Part

Remark
EU2015/863 (ROHS III)

Expires

Change after aging in Air: 70h/100°C

Hardness (ISO 188, Shore A)
Tensile strength (ISO 188)
Elongation at break (ISO 188)

Shore
MPa
%

Typ. values			
Base value	After aging	difference	
70	75	5	
16.5	18.1	10 %	
350	287	-18 %	

Change after aging in Air: 72h/125°C

Hardness (ISO 188, Shore A)
Tensile strength (ISO 188)
Elongation at break (ISO 188)

Shore
MPa
%

Typ. values			
Base value	After aging	difference	
70	78	8	
16.5	19	15 %	
350	227.5	-35 %	

Change after aging in Diesel: 46h/23°C

Hardness (ISO 1817, Shore A)
Tensile strength (ISO 1817)
Elongation at break (ISO 1817)
volume change (ISO 1817)
weight change

Shore
MPa
%
%
%

Typ. values			
Base value	After aging	difference	
70	67	-3	
16.5	14.8	-10 %	
350	315	-10 %	
	4		
	3		

Change after aging in Diesel: 48h/80°C

Hardness (ISO 1817, Shore A)
Tensile strength (ISO 1817)
Elongation at break (ISO 1817)
volume change (ISO 1817)
weight change

Shore
MPa
%
%
%

Typ. values			
Base value	After aging	difference	
70	59	-11	
16.5	14.2	-14 %	
350	301	-14 %	
	15		
	10		

Change after aging in FAM A: 46h/23°C

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

Shore
%

Typ. values			
Base value	After aging	difference	
70	50	-20	
	64		

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

Hardness (ISO 1817, Shore A)
Tensile strength (ISO 1817)
Elongation at break (ISO 1817)
volume change (ISO 1817)

Shore
MPa
%
%

Typ. values			
Base value	After aging	difference	
70	69	-1	
16.5	15.7	-5 %	
350	325.5	-7 %	
	1		

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

Hardness (ISO 1817, Shore A)
Tensile strength (ISO 1817)
Elongation at break (ISO 1817)
volume change (ISO 1817)

Shore
MPa
%
%

Typ. values			
Base value	After aging	difference	
70	57	-13	
16.5	7.4	-55 %	
350	164.5	-53 %	
	30		

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

Hardness (ISO 1817, Shore A)
Tensile strength (ISO 1817)
Elongation at break (ISO 1817)
volume change (ISO 1817)

Shore
MPa
%
%

Typ. values			
Base value	After aging	difference	
70	76	6	
16.5	18.5	12 %	
350	273	-22 %	
	-4.5		

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

Hardness (ISO 1817, Shore A)
Tensile strength (ISO 1817)
Elongation at break (ISO 1817)
volume change (ISO 1817)

Shore
MPa
%
%

Typ. values			
Base value	After aging	difference	
70	73	3	
16.5	15.7	-5 %	
350	220.5	-37 %	
	-4		

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

Hardness (ISO 1817, Shore A)
Tensile strength (ISO 1817)
Elongation at break (ISO 1817)
volume change (ISO 1817)

Shore
MPa
%
%

Typ. values			
Base value	After aging	difference	
70	63	-7	
16.5	15.2	-8 %	
350	304.5	-13 %	
	7		

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

Hardness (ISO 1817, Shore A)
Tensile strength (ISO 1817)
Elongation at break (ISO 1817)
volume change (ISO 1817)

Shore
MPa
%
%

Typ. values			
Base value	After aging	difference	
70	64	-6	
16.5	12.4	-25 %	
350	227.5	-35 %	
	8		

Change after aging in Pentosin CHF 11S: 70h/100°C

Hardness (ISO 1817, Shore A)
Tensile strength (ISO 1817)
Elongation at break (ISO 1817)
volume change (ISO 1817)

Shore
MPa
%
%

Typ. values			
Base value	After aging	difference	
70	69	-1	
16.5	17.3	5 %	
350	287	-18 %	
	2		

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

Hardness (ISO 1817, Shore A)
Tensile strength (ISO 1817)
Elongation at break (ISO 1817)
volume change (ISO 1817)

Shore
MPa
%
%

Typ. values			
Base value	After aging	difference	
70	67	-3	
16.5	16.2	-2 %	
350	315	-10 %	
	6		

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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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