

Material

90 NBR 109

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Physical properties

Density

DIN EN ISO 1183-1

required

1.33 ±0.02

actual

1.33

g/cm³

Hardness

DIN ISO 7619-1

90 ±5

90

Shore

Rebound resilience

DIN 53512

%

Modulus

100 %, DIN 53504, S2

8

11.5

MPa

Tensile strength

DIN 53504, S2

10

12.6

MPa

Elongation at break

DIN 53504, S2

110

155

%

Compression set

DIN ISO 815, 22 h, 100 °C

25

%

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Tested after ASTM D 2000: M 7 BG 910 B14 EA14 EF11 EF21 EO14 EO34

		required	actual
Hardness	Shore	90 ±5	93
Tensile strength	MPa	min. 10	14.5
Elongation at break	%	min. 100	145
Change after aging in Air 70h/100°C			
Hardness	Shore A	---	2
Tensile strength	%	---	7
Elongation at break	%	---	-14
B14 Compression set 22h/100°C	%	25	21
EA14 Change after aging in Distilled water 70h/100°C			
Hardness	Shore A	±10	-4
Volume	%	±15	6
EF11 Change after aging in Fuel A 70h/23°C			
Hardness	Shore A	±10	-2
Tensile strength	%	-25	-15
Elongation at break	%	-25	-11
Volume	%	-5 to 10	1.7
EF21 Change after aging in Fuel B 70h/23°C			
Hardness	Shore A	0 to -30	-14
Tensile strength	%	-60	-45
Elongation at break	%	-60	-37
Volume	%	0 to 40	23
EO14 Change after aging in IRM 901 70h/100°C			
Hardness	Shore A	±5	5
Tensile strength	%	-25	-15
Elongation at break	%	-45	-25
Volume	%	-10 to 5	-6
EO34 Change after aging in IRM 903 70h/100°C			
Hardness	Shore A	-10 to 5	-8
Tensile strength	%	-45	-15
Elongation at break	%	-45	-28
Volume	%	0 to 25	11

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Temperature - range: -25 °C to 100 °C

The given values are based on a limited number of tests on standard test pieces (2mm sheets) produced in the laboratory. The data from finished parts can deviate from above values depending on the manufactories 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 provisons do not plan for something else.