Freudenberg
Sealing Technologies

Material
50 NBR 253

black
cross linking: sulfur

Attention! Not for new samples

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possible replacement material for: 50 NBR 253

50 NBR 216214

Physical properties	**required**	**actual**	
Density DIN EN ISO 1183-1	1.11 ±0.02	1.11	g/cm³
Hardness DIN ISO 7619-1	50 ±5	50	Shore
Rebound resilence DIN 53512	---	39	%
Modulus 100 %, DIN 53504, S2	> 0.8	1.2	MPa
Tensile strength DIN 53504, S2	> 11	14.8	MPa
Elongation at break DIN 53504, S2	> 500	620	%
Compression set DIN ISO 815, 22 h, 100 °C	< 35	25	%

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Tested after ASTM D 2000: M 5 BG 510 A14 B14 B34 EO14 EO34 F19

			required	actual
	Hardness	Shore	50 ±5	49
	Tensile strength	MPa	min. 10	14.1
	Elongation at break	%	min. 300	530
A14	**Change after aging in Air 70h/100°C**			
	Hardness	Shore A	±15	7
	Tensile strength	%	-20	-7
	Elongation at break	%	-40	-25
B14	**Compression set 22h/100°C**	%	25	11
B34	**Compression set 22h/100°C**	%	25	14
EO14	**Change after aging in IRM 901 70h/100°C**			
	Hardness	Shore A	-5 to 15	5
	Tensile strength	%	-25	10
	Elongation at break	%	-45	-20
	Volume	%	-10 to 5	-6
EO34	**Change after aging in IRM 903 70h/100°C**			
	Hardness	Shore A	0 to -15	-19
	Tensile strength	%	-45	-40
	Elongation at break	%	-45	-40
	Volume	%	0 to 35	48
F19	**Low-temperature resistance after 3 min at -55 °C 3min./-55°C**	°C	pass	

Temperature-range: - 50 °C to +80 °C

Surface resistance R_o according to DIN IEC 93 / VDE 0303 part 30: 5,2 x 10^5

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

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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.

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