Freudenberg
Sealing Technologies

Material
72 NBR 872

black
cross linking: sulfur

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Physical properties	**required**	**actual**	
Density DIN EN ISO 1183	1.21 ±0.02	1.21	g/cm³
Hardness DIN ISO 7619-1	72 ±5	72	Shore
Micro hardness DIN ISO 48 Verfahren M	72 ±5	70	IRHD
Rebound resilence DIN 53512	> 25	34	%
Modulus 100 %, DIN 53504, S2	> 4	6.5	MPa
Tensile strength DIN 53504, S2	> 14	16.5	MPa
Elongation at break DIN 53504, S2	> 250	295	%
Compression set DIN ISO 815, I, 24 h, 100 °C, 25 %	< 25	18	%
Low Temperature DIN 53765, DSC	---	-34	°C
Torsions pendulum test DIN 53445	---	-25	°C

Certificates	**Country**	**Part**	**Remark**	**Expires**	**unlimited**
BAM	D	Seals	60 °C	07 / 2014	☐
DVGW	D	Seals	DIN EN 549 H3 B1	05 / 2016	☐
DVGW engl.	D	Seals	DIN EN 549 H3 B1	05 / 2016	☐

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Tested after ASTM D 2000: M 2 BG 714 B14 B34 EF11 EF21 EO14 EO34

			required	actual
	Hardness	Shore	70 ±5	72
	Tensile strength	MPa	min. 14	18
	Elongation at break	%	min. 250	325
	Change after aging in Air 70h/100°C			
	Hardness	Shore A	---	3
	Tensile strength	%	---	9
	Elongation at break	%	---	-7
B14	**Compression set 22h/100°C**	%	25	11
B34	**Compression set 22h/100°C**	%	25	12
EF11	**Change after aging in Fuel A 70h/23°C**			
	Hardness	Shore A	±10	-1
	Tensile strength	%	-25	3
	Elongation at break	%	-25	7
	Volume	%	-5 to 10	2
EF21	**Change after aging in Fuel B 70h/23°C**			
	Hardness	Shore A	0 to -30	-12
	Tensile strength	%	-60	-28
	Elongation at break	%	-60	-33
	Volume	%	0 to 40	28.6
EO14	**Change after aging in IRM 901 70h/100°C**			
	Hardness	Shore A	-5 to 10	5
	Tensile strength	%	-25	18
	Elongation at break	%	-45	5
	Volume	%	-10 to 5	-8
EO34	**Change after aging in IRM 903 70h/100°C**			
	Hardness	Shore A	-10 to 5	-4
	Tensile strength	%	-45	-5
	Elongation at break	%	-45	-22
	Volume	%	0 to 25	8

Preferred area of application: o-rings, precision mouldings

Temperature-range:	**dynamic**	**-30 °C**	**bis**	**100 °C**
	static	**-40 °C**	**bis**	**100 °C**

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The material doesn't contain halogenated components.

Compliant with the EU-directives 2011/65/EC (RoHS) and 2002/95/EC (RoHS).

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.