

# Material

## 80 NBR 878

black

cross linking: sulfur

**revision index**

5

**revision date**

5/24/2019

**page**

1 / 3

### Physical properties

	<b>nominal range</b>	<b>typical values</b>	
<b>Density</b> DIN EN ISO 1183-1	---	1.30	g/cm <sup>3</sup>
<b>Hardness</b> DIN ISO 7619-1	80 ±5	83	Shore
<b>Rebound resilience</b> DIN 53512	---	24	%
<b>Modulus</b> 100 %, DIN 53504, S2	> 8	12.1	MPa
<b>Tensile strength</b> DIN 53504, S2	> 11.5	15.5	MPa
<b>Elongation at break</b> DIN 53504, S2	> 150	160	%
<b>Compression set</b> DIN ISO 815, 22 h, 100 °C	---	20	%
<b>Low Temperature</b> ISO 11357-2, DSC	---	-35	°C
<b>Temperature range</b>	-30°C to 100°C		

### Declarations of conformity

	<b>Country</b>	<b>Part</b>	<b>Remark</b>	<b>Expires</b>	<b>unlimited</b>
RoHS conform			including EU 2011/65 and EU2015/863 (ROHS III)		<input checked="" type="checkbox"/>

### Freudenberg

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5

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page 2 / 3

Tested after ASTM D 2000: M 7 BG 814 B14 EA14 EF11 EF21 EO14 EO34 F16

		nominal range	typical values
Hardness	Shore	80 ±5	82
Tensile strength	MPa	min. 14	15.5
Elongation at break	%	min. 125	165
<b>Change after aging in Air 70h/100°C</b>			
Hardness	Shore A	---	4
Tensile strength	%	---	5
Elongation at break	%	---	-40
<b>B14 Compression set 22h/100°C</b>	%	25	17
<b>EA14 Change after aging in Distilled water 70h/100°C</b>			
Hardness	Shore A	±10	0
Volume	%	±15	3
<b>EF11 Change after aging in Fuel A 70h/23°C</b>			
Hardness	Shore A	±10	-2
Tensile strength	%	-25	3
Elongation at break	%	-25	3
Volume	%	-5 to 10	2
<b>EF21 Change after aging in Fuel B 70h/23°C</b>			
Hardness	Shore A	0 to -30	-14
Tensile strength	%	-60	-25
Elongation at break	%	-60	-22
Volume	%	0 to 40	27
<b>EO14 Change after aging in IRM 901 70h/100°C</b>			
Hardness	Shore A	±5	4
Tensile strength	%	-25	12

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<b>revision index</b>	<b>revision date</b>		<b>page</b>	<b>3 / 3</b>
5	5/24/2019			
Elongation at break		%	-45	-14
Volume		%	-10 to 5	-4
<b>EO34 Change after aging in IRM 903 70h/100°C</b>				
Hardness		Shore A	-10 to 5	-9
Tensile strength		%	-45	21
Elongation at break		%	-45	-3
Volume		%	0 to 25	11
<b>F16</b>	<b>Low-temperature resistance after 3 min at -35 °C 3min./-35°C</b>	°C		pass

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 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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