

Technical data sheet in accordance with ASTM

# Material

## FKM FP802802

black

cross linking: bisphenolically

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### Physical properties

	nominal range	typical values	
<b>Density</b> ASTM D 297	1.84 ±0.02	1.84	g/cm <sup>3</sup>
<b>Hardness</b> ASTM D 2240, Shore A	80 ±5	80	Shore
<b>Modulus</b> 100 %, ASTM D412	---	8.6	MPa
<b>Tensile strength</b> ASTM D 412	---	14.9	MPa
<b>Elongation at break</b> ASTM D 412	---	177	%
<b>Low temperature test</b> ASTM D 1329, TR10	---	-16	°C
<b>Compression set</b> ASTM D 395, Slab B, 22 h, 175 °C	---	13	%
<b>Compression set</b> ASTM D 395, Slab B, 22 h, 200 °C	---	15	%
<b>Temperature range</b>	-20°C to 200°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 EU2015/863 (ROHS III)	see DoC

### Freudenberg

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### Change after aging in Air: 70h/250°C

Hardness (ASTM D573, Shore A)  
Tensile strength (ASTM D573)  
Elongation at break (ASTM D573)

Shore  
MPa  
%

Typ. values			
Base value	After aging	difference	
80	83	3	
14.9	14.4	-3 %	
177	188.5	6 %	

### Change after aging in ASTM service fluid # 101: 70h/23°C

Hardness (ASTM D471, Shore A)  
Tensile strength (ASTM D471)  
Elongation at break (ASTM D471)  
volume change (ASTM D471)

Shore  
MPa  
%  
%

Typ. values			
Base value	After aging	difference	
80	75	-5	
14.9	13.7	-8 %	
177	173.6	-2 %	
	9.6		

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

Hardness (ASTM D471, Shore A)  
Tensile strength (ASTM D471)  
Elongation at break (ASTM D471)  
volume change (ASTM D471)

Shore  
MPa  
%  
%

Typ. values			
Base value	After aging	difference	
80	80	0	
14.9	14.3	-4 %	
177	179.6	1 %	
	1.7		

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**Tested after ASTM D 2000: M 2 HK 810 A1-10 B37 B38 EF31 EO78 Z1 Z2 Z3**

		<b>nominal range</b>	<b>typical values</b>
Hardness	Shore	80 ±5	80 ±5
Tensile strength	MPa	min. 10	14
Elongation at break	%	min. 150	190
<b>A1-10 Change after aging in Air 70h/250°C</b>			
Hardness	Shore A	10	4
Tensile strength	%	-25	-8.6
Elongation at break	%	-25	-2.8
<b>B37 Compression set 22h/175°C</b>	%	50	15.9
<b>B38 Compression set 22h/200°C</b>	%	50	18.7
<b>EF31 Change after aging in Fuel C 70h/23°C</b>			
Hardness	Shore	±5	-3
Tensile strength	%	-25	-17.9
Elongation at break	%	-20	-11.1
Volume	%	0 to 10	8.9
<b>EO78 Change after aging in Fluid No. 101 70h/200°C</b>			
Hardness	Shore	-15 to 5	-5
Tensile strength	%	-40	-17
Elongation at break	%	-20	-5.6
Volume	%	0 to 15	2.5
<b>Z1 Change after aging in IRM 903 70h/150°C</b>			
Hardness ASTM D2240, Shore A, 23 °C	Shore	-5 to 0	-1
Tensile strength ASTM D412, C, 23 °C	MPa	---	1.3
Elongation at break ASTM D412, C, 23 °C	%	---	8.2

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	volume change ASTM D471	%	0 to 5	1.1
<b>Z2</b>	<b>Low temperature test ASTM D1329, TR10</b>	°C	-15	-16.3
<b>Z3</b>	<b>Low-temperature resistance ASTM D 2137, -10 °C, 3 min</b>	-	no cracks	no cracks

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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