

# Material

## 83 FKM 592

grey-brown

cross linking: bisphenolically

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### Physical properties

	nominal range	typical values	
<b>Density</b> DIN EN ISO 1183-1	1.88 ±0.03	1.85	g/cm³
<b>Hardness</b> DIN ISO 7619-1	83 ±5	83	Shore
<b>Micro hardness</b> DIN ISO 48 Verfahren M	83 +2/-8	82	IRHD
<b>Rebound resilience</b> DIN 53512	> 3	7	%
<b>Modulus</b> 100 %, DIN 53504, S2	> 4	6.3	MPa
<b>Tensile strength</b> DIN 53504, S2	> 6	7.8	MPa
<b>Elongation at break</b> DIN 53504, S2	> 110	140	%
<b>Compression set</b> DIN ISO 815, Slab B, 24 h, 175 °C	< 25	15	%
<b>Compression set</b> DIN ISO 815, Slab B, 22 h, 200 °C	< 30	20	%
<b>Temperature range</b>	-15°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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Tested after ASTM D 2000: M 2 HK 807 A1-10 B37 B38 EF31 EO78 F15 Z1

		nominal range	typical values
Hardness	Shore	80 ±5	82
Tensile strength	MPa	min. 7	8
Elongation at break	%	min. 150	140
<b>A1-10 Change after aging in Air 70h/250°C</b>			
Hardness	Shore A	10	6
Tensile strength	%	-25	0
Elongation at break	%	-25	-22
<b>B37 Compression set 22h/175°C</b>	%	50	12
<b>B38 Compression set 22h/200°C</b>	%	50	14
<b>EF31 Change after aging in Fuel C 70h/23°C</b>			
Hardness	Shore	±5	-2
Tensile strength	%	-25	-13
Elongation at break	%	-20	-3
Volume	%	0 to 10	3
<b>EO78 Change after aging in Fluid No. 101 70h/200°C</b>			
Hardness	Shore	-15 to 5	-8
Tensile strength	%	-40	-15
Elongation at break	%	-20	-10
Volume	%	0 to 15	10
<b>F15 Low-temperature resistance after 3 min at -25 °C 3min./-25°C</b>		pass	
<b>Z1 Elongation at break DIN 53504</b>	%	---	145

The material is resistant in ozone to 500 pphm

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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.

**Freudenberg**

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