

Material

80 FKM 610

brown

cross linking: bisphenolically

revision index	revision date	page	1 / 3
13	11/9/2017		

Physical properties	nominal range	typical values	
Density DIN EN ISO 1183-1	2.10 ±0.03	2.10	g/cm ³
Hardness DIN ISO 7619-1	80 ±5	83	Shore
Micro hardness DIN ISO 48 Verfahren M	80 +5/-8	82	IRHD
Rebound resilience DIN 53512	> 3	6	%
Modulus 100 %, DIN 53504, S2, 23 °C	> 8	10.5	MPa
Tensile strength DIN 53504, S2	> 10	13.6	MPa
Elongation at break DIN 53504, S2	> 120	145	%
Compression set DIN ISO 815, B, 22 h, 175 °C	< 25	15	%
Compression set DIN ISO 815, B, 24 h, 200 °C	< 30	18	%
Low Temperature DIN 53765, nach DSC	< 15	-19	°C
Temperature range	static: -40°C to 200°C dynamic: -25°C to 200°C		

Declarations of conformity

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

Freudenberg

Freudenberg FST GmbH
Global Material Technology
Daniel Danzer

Telefon: +49 6201 960 5033
Fax: -
Email: Daniel.Danzer@fst.com



Material

80 FKM 610

brown

cross linking: bisphenolically

revision index
13

revision date
11/9/2017

page 2 / 3

Tested after ASTM D 2000: M 2 HK 807 A1-10 B37 B38 EF31 EO78 F15 Z1 Z2

		nominal range	typical values
Hardness	Shore	80 ±5	81
Tensile strength	MPa	min. 7	13.6
Elongation at break	%	min. 150	120
A1-10 Change after aging in Air 70h/250°C			
Hardness	Shore A	10	3
Tensile strength	%	-25	12
Elongation at break	%	-25	-6
B37 Compression set 22h/175°C	%	50	10
B38 Compression set 22h/200°C	%	50	14
EF31 Change after aging in Fuel C 70h/23°C			
Hardness	Shore	±5	-1
Tensile strength	%	-25	-25
Elongation at break	%	-20	-20
Volume	%	0 to 10	3
EO78 Change after aging in Fluid No. 101 70h/200°C			
Hardness	Shore	-15 to 5	-7
Tensile strength	%	-40	-9
Elongation at break	%	-20	-1
Volume	%	0 to 15	9
F15 Low-temperature resistance after 3 min at -25 °C 3min./-25°C		pass	
Z1 Elongation at break DIN 53504	%	---	120
Z2 Density DIN EN ISO 1183, 20 °C	g/cm ³	---	2.1

Freudenberg

Freudenberg FST GmbH
Global Material Technology
Daniel Danzer

Telefon: +49 6201 960 5033
Fax: -
Email: Daniel.Danzer@fst.com



Material 80 FKM 610

brown

cross linking: bisphenolically

revision index

13

revision date

11/9/2017

page 3 / 3

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

Freudenberg FST GmbH
Global Material Technology
Daniel Danzer

Telefon: +49 6201 960 5033
Fax: -
Email: Daniel.Danzer@fst.com

