

# Material

## 75 FKM 585

black-brown

cross linking: bisphenolically

**revision index**  
12

**revision date**  
4/13/2022

**page** 1 / 3

### Physical properties

	nominal range	typical values	
<b>Density</b> DIN EN ISO 1183-1	2.05 ±0.03	2.05	g/cm <sup>3</sup>
<b>Hardness</b> DIN ISO 7619-1	75 ±5	75	Shore
<b>Rebound resilience</b> DIN 53512	---	6	%
<b>Modulus</b> 100 %, DIN 53504, S2	> 4	6.9	MPa
<b>Tensile strength</b> DIN 53504, S2	> 10	12.8	MPa
<b>Elongation at break</b> DIN 53504, S2	> 175	225	%
<b>Compression set</b> DIN ISO 815, 22 h, 175 °C	---	28	%
<b>Low Temperature</b> DIN 53765, DSC	---	-16	°C
<b>Temperature range</b>	-30°C to 200°C		

### Declarations of conformity

	Country	Part	Remark	Expires	unlimited
ADI Free			see certificate		<input checked="" type="checkbox"/>
PFOA / PFOS 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 75 FKM 585

black-brown

cross linking: bisphenolically

**revision index**  
12

**revision date**  
4/13/2022

**page** 2 / 3

### Tested after ASTM D 2000: M 2 HK 710 A1-10 B37 B38 EF31 EO78 Z1

		<b>nominal range</b>	<b>typical values</b>
Hardness	Shore	70 ±5	74
Tensile strength	MPa	min. 10	12.5
Elongation at break	%	min. 175	240
<b>A1-10 Change after aging in Air 70h/250°C</b>			
Hardness	Shore A	10	1
Tensile strength	%	-25	2
Elongation at break	%	-25	18
<b>B37 Compression set 22h/175°C</b>	%	50	29
<b>B38 Compression set 22h/200°C</b>	%	50	40
<b>EF31 Change after aging in Fuel C 70h/23°C</b>			
Hardness	Shore	±5	-1
Tensile strength	%	-25	-10
Elongation at break	%	-20	40
Volume	%	0 to 10	2
<b>EO78 Change after aging in Fluid No. 101 70h/200°C</b>			
Hardness	Shore	-15 to 5	-4
Tensile strength	%	-40	-10
Elongation at break	%	-20	35
Volume	%	0 to 15	7
<b>Z1 Low Temperature DIN 53765, DSC</b>	°C	---	-16

### Freudenberg

Freudenberg FST GmbH  
Global Material Technology  
Daniel Danzer

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



## Material 75 FKM 585

black-brown

cross linking: bisphenolically

### revision index

12

### revision date

4/13/2022

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 provisions 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

