

Technical data sheet in accordance with ASTM

# Material

## EPDM EP703901

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### Physical properties

	nominal range	typical values	
<b>Density</b> ISO 2781 A	1.14 ±0.03	1.14	g/cm <sup>3</sup>
<b>Hardness</b> ASTM D2240, Shore A, 23 °C	70 ±5	72	Shore
<b>Tensile strength</b> ISO 37	---	17	MPa
<b>Elongation at break</b> ISO 37	---	210	%
<b>Modulus</b> 100 %, ISO 37	---	4.5	MPa
<b>Tear strength</b> ISO 34-1, B, 23 °C	---	11	KN/m
<b>Tear strength</b> ISO 34-1, C, 23 °C	---	32	KN/m
<b>Low temperature test</b> ISO 2921, TR10	---	-42	°C
<b>Low Temperature</b> ISO 11357-2, DSC	---	-55	°C
<b>Low Temperature resistance</b> DIN ISO 812, Brittleness	---	-70	°C
<b>Ozone Resistance</b> ISO 1431-1, 40 °C, 70 h, 200 pphm, no brittle	---	0	Rating
<b>Compression set</b> DIN ISO 815 A, 22 h, 100 °C	---	8	%
<b>Compression set</b> ISO 815 A, 70 h, 23 °C	---	10	%
<b>Compression set</b> DIN ISO 815 A, 22 h, 125 °C	---	10	%
<b>Compression set</b> DIN ISO 815 A, 70 h, 100 °C	---	12	%

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<b>Compression set</b> DIN ISO 815 A, 22 h, 150 °C		---	13	%
<b>Compression set</b> DIN ISO 815 A, 70 h, 150 °C		---	24	%
<b>Compression set</b> DIN ISO 815 A, 168 h, 150 °C		---	44	%
<b>Temperature range</b>	-65°C to 150°C		short term: 160°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
(EG) 2023/2006 (GMP)	EU		(EG) 2023/2006 (GMP)	see DoC
ACS	F	O-Ring	Drinking water	05 / 2024
ADI Free			see certificate	see DoC
BPA/Phthalate free			BPA/Phthalate free	see DoC
DVGW Baumusterprüfzertifikat Wasser	D		DIN EN 681-1 WA/ WB	06 / 2026
DVGW Type examination certificate water	D		DIN EN 681-1 WA/ WB	06 / 2026
FDA	USA	Seals	§ 177.2600	see DoC
Info ROHS and ELV			EU 2000/53 (ELV) including EU 2011/65 and EU2015/863 (ROHS III)	see DoC
USP Chapter 87 (in vitro)	USA		in vitro	see DoC
USP Class VI Ch. 88 - 121 °C	USA		in vivo	see DoC
WRAS BS 6920	GB			01 / 2029

### Change after aging in Acetone: 24h/23°C

		Typ. values		
		Base value	After aging	difference
Hardness (ISO 1817, Shore A)	Shore	72	66	-6
volume change (ISO 1817)	%		5	
weight change	%		4	

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### Change after aging in AdBlue: 168h/55°C

Hardness (ISO 1817, Shore A)  
Tensile strength (ISO 1817)  
Elongation at break (ISO 1817)  
volume change (ISO 1817)

Shore	72	71	-1
MPa	17	16.8	-1 %
%	210	205.8	-2 %
%		1	

#### Typ. values

Base value After aging difference

### Change after aging in Air: 70h/100°C

Hardness (ISO 188 B, Shore A)  
Tensile strength (ISO 188 B)  
Elongation at break (ISO 188 B)  
volume change (ISO 188 B)  
weight change

Shore	72	73	1
MPa	17	15.6	-8 %
%	210	184.8	-12 %
%		-0.1	
%		-0.1	

#### Typ. values

Base value After aging difference

### Change after aging in Air: 70h/125°C

Hardness (ISO 188 B, Shore A)  
Tensile strength (ISO 188 B)  
Elongation at break (ISO 188 B)  
volume change (ISO 188 B)  
weight change

Shore	72	74	2
MPa	17	15.3	-10 %
%	210	180.6	-14 %
%		-0.2	
%		-0.2	

#### Typ. values

Base value After aging difference

### Change after aging in Air: 1008h/125°C

Hardness (ISO 188 B, Shore A)  
Tensile strength (ISO 188 B)  
Elongation at break (ISO 188 B)  
volume change (ISO 188 B)

Shore	72	77	5
MPa	17	16	-6 %
%	210	178.5	-15 %
%		-1	

#### Typ. values

Base value After aging difference

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### Change after aging in Air: 70h/150°C

Hardness (ISO 188 B, Shore A)  
Tensile strength (ISO 188 B)  
Elongation at break (ISO 188 B)  
volume change (ISO 188 B)  
weight change

Shore	72	76	4
MPa	17	15.3	-10 %
%	210	184.8	-12 %
%		-0.4	
%		-0.4	

#### Typ. values

Base value After aging difference

### Change after aging in Glysantin G48 / dest. Wasser 50:50: 1008h/125°C

Hardness (ISO 1817, Shore A)  
Tensile strength (ISO 1817)  
Elongation at break (ISO 1817)  
volume change (ISO 1817)  
weight change

Shore	72	71	-1
MPa	17	16.3	-4 %
%	210	195.3	-7 %
%		2	
%		2	

#### Typ. values

Base value After aging difference

### Change after aging in Water: 70h/100°C

Hardness (ISO 1817, Shore A)  
Tensile strength (ISO 1817)  
Elongation at break (ISO 1817)  
volume change (ISO 1817)  
weight change

Shore	72	71	-1
MPa	17	16.3	-4 %
%	210	195.3	-7 %
%		1.3	
%		1	

#### Typ. values

Base value After aging difference

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### **No ASTM D2000 properties available**

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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