

Material

70 Simriz 491

black

cross linking: peroxidic



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Physical properties

	nominal range	typical values	
Density DIN EN ISO 1183-1, 23 °C	1.87 ±0.03	1.87	g/cm ³
Hardness DIN ISO 7619-1, Shore A, 23 °C	70 ±5	70	Shore
Modulus 100 %, DIN 53504, S2, 23 °C	> 4.5	6.1	MPa
Tensile strength DIN 53504, S2, 23 °C	> 12	14.3	MPa
Elongation at Break DIN 53504, S2, 23 °C	> 150	178	%
Compression set DIN ISO 815, B, 72 h, 200 °C, 25 %	< 35	25	%
Low Temperature ISO 11357-2, DSC	---	-10	°C
Temperature range	-20°C to 230°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"/>

Change after aging in Essigsäure 20%: 72h/98°C

		Typ. values		
		Base value	After aging	difference
Hardness (DIN ISO 7619-1, Shore A, 23 °C)	Shore	73	72	-1
Tensile strength (DIN 53504, S2, 23 °C)	MPa	14.8	13	-12 %
Elongation at break (DIN 53504, S2, 23 °C)	%	175	184	5 %
volume change (DIN 53521)	%		3.4	

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Change after aging in Ethylene diamine: 72h/100°C

Hardness (DIN ISO 7619-1, Shore A, 23 °C)
Tensile strength (DIN 53504, S2, 23 °C)
Elongation at break (DIN 53504, S2, 23 °C)
volume change (DIN 53521)

	Shore	MPa	%	%
Base value	73	14.8	175	
After aging	71	11	201	12.7
difference	-2	-26 %	15 %	

Typ. values

Change after aging in Methanol: 72h/64°C

Hardness (DIN ISO 7619-1, Shore A, 23 °C)
Tensile strength (DIN 53504, S2, 23 °C)
Elongation at break (DIN 53504, S2, 23 °C)
volume change (DIN 53521)

	Shore	MPa	%	%
Base value	73	14.8	175	
After aging	72	13.3	194	1.4
difference	-1	-10 %	11 %	

Typ. values

Change after aging in Methyl ethyl ketone: 72h/80°C

Hardness (DIN ISO 7619-1, Shore A, 23 °C)
Tensile strength (DIN 53504, S2, 23 °C)
Elongation at break (DIN 53504, S2, 23 °C)
volume change (DIN 53521)

	Shore	MPa	%	%
Base value	73	14.8	175	
After aging	71	12.4	210	4.3
difference	-2	-16 %	20 %	

Typ. values

Change after aging in sodium hydroxide 20%: 72h/98°C

Hardness (DIN ISO 7619-1, Shore A, 23 °C)
Tensile strength (DIN 53504, S2, 23 °C)
Elongation at break (DIN 53504, S2, 23 °C)
volume change (DIN 53521)

	Shore	MPa	%	%
Base value	73	14.8	175	
After aging	73	15.1	193	-0.2
difference	0	2 %	10 %	

Typ. values

Change after aging in Water: 72h/200°C

Hardness (DIN ISO 7619-1, Shore A, 23 °C)
Tensile strength (DIN 53504, S2, 23 °C)
Elongation at break (DIN 53504, S2, 23 °C)
volume change (DIN 53521)

	Shore	MPa	%	%
Base value	73	14.8	175	
After aging	71	11.8	166	6.6
difference	-2	-20 %	-5 %	

Typ. values

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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) produced in the laboratory. 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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