STEMETHAN PUR A90

Product data sheet

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STEMPLAST HATZIAVGOUSTIS
ENGINEERING PLASTICS

Material:	polyurethane elastomer
DIN EN ISO 1043-1[1] Νόρμα:	PUR | polyurethane
Product's shape:	semi-finished products

Material characteristics

Excellent elastic properties, excellent resistance to deformation, excellent elastic recovery, low moisture absorption.

Application examples

Hydraulic devices, sealing rings, bushes, coupler, rollers, wheels, springs.

General properties

Density ρ	1.25 gr/cm^3	DIN EN ISO 1183-1-A ASTM D792 sim.
Stress at 20% strain σ Stress at 300% strain σ Tensile strength σ_T Elongation at break ε_B	2.9-3.4 MPa 13.7-14.7 MPa 29.4 MPa 500-480 %	ISO 37 DIN 53504-S2 ASTM D412
Tear strength (propagation resistance)	60-63 N/mm	ISO 34-1B ASTM D624
Compression set *(20 °C, 72 h)* *(70 °C, 24 h)*	 20% 30%	ISO 815-B DIN 53517 sim. ASTM D395 sim.
Hardness Shore scale A	90 ±3	DIN EN ISO 7619-1 DIN 53505/ASTM D2240 sim.
Abrasion resistance	44-41 mm^3	DIN EN ISO 4649-A DIN 53516/ASTM D5963 sim.
Volume resistivity ρ Surface resistivity σ	10^{11} Ω·cm 10^{14} - 10^{15} Ω	IEC 60093 / VDE 0303-30 ASTM D257
Dielectric strength E_d	24-26 kV/mm	IEC 60243-1 / VDE 0303-21 DIN 53481 sim. / ASTM D149
Thermal conductivity λ	0.20-0.21 W/(m·K)	ISO 22007-2 / ISO 8302 sim. DIN 52612-2/ASTM C177 sim.
Service temperature long term	- 10 / 60 °C	

The indicated values result from numerous individual measurements for an approximation of the values and correspond to our today's knowledge. They serve as information about our products and are presented as a guide to choose from our range of materials. This, however, does not include an assurance of specific properties or the suitability for particular application purposes that are legally binding. Since the properties also depend on the dimension of the semi-finished products and the degree of crystallisation (e.g. nucleating by pigments), the actual values of the properties of a particular product may differ from the indicated values.

[1] DIN 7728-1, January 1988 edition, has been superseded by the specifications of EN ISO 1043-1, which is identical to ISO 1043-1