

STEMELAN NR PARA A45

Product data sheet

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STEMPLAST HATZIAVGOSTIS
ENGINEERING PLASTICS

Material:	natural rubber / polyisoprene (NR para)
ISO 1629:2013 Norm:	NR natural rubber
Product's shape:	semi-finished products

Material characteristics

Excellent elastic properties, very good resistance to water, most salts and mild acids, high tensile strength, high elongation at break, high tear strength, very high abrasion resistance, good vibration dampening characteristics, good friction properties, poor petroleum oil resistance, poor ozone and UV resistance.

Application examples

General purpose applications, vibration isolators, gaskets, sealing elements, O-rings.

General properties

Density ρ	1.05 gr/cm ³	DIN EN ISO 1183-1-A ASTM D792 sim.
Stress at 20% strain σ		ISO 37
Stress at 300% strain σ		DIN 53504-S2
Tensile strength σ_T	16 MPa	ASTM D412
Elongation at break ϵ_B	600 %	
Tear strength (propagation resistance)		ISO 34-1B ASTM D624
Compression set (20 °C, 72 h) (70 °C, 24 h)	30 %	ISO 815-B DIN 53517 sim. ASTM D395 sim.
Hardness Shore scale A	45 \pm 5	DIN EN ISO 7619-1 DIN 53505/ASTM D2240 sim.
Abrasion resistance	120 mm ³	DIN EN ISO 4649-A DIN 53516/ASTM D5963 sim.
Volume resistivity ρ		IEC 60093 / VDE 0303-30
Surface resistivity σ		ASTM D257
Dielectric strength E_d		IEC 60243-1 / VDE 0303-21 DIN 53481 sim. / ASTM D149
Thermal conductivity λ		ISO 22007-2 / ISO 8302 sim. DIN 52612-2/ASTM C177 sim.
Service temperature long term	- 25 / 70 °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.