

ETFE – Material Properties

Mechanical Properties

Property	Standard	Value	Unit
Indentation hardness	DIN 53 505	62 – 72	Sh. D
Ball indentation hardness	DIN 53 456	34 – 40	N/mm ²
Tensile strength (23°C)	DIN 53 455	36 – 48	N/mm ²
Elongation at break (23°C)	DIN 53 455	200 – 350	%
Tensile modulus	DIN 53 457	500 – 1200	N/mm ²
Coefficient of friction (steel – dynamic)	–	0.40	–

Physical Properties

Property	Standard	Value	Unit
Density	–	1.74 – 1.80	g/cm ³
Water absorption	DIN 53 495	0.02	%

Electrical Properties

Property	Standard	Value	Unit
Dielectric strength	DIN 53 481	60 – 90	kV/mm

Thermal Properties

Property	Standard	Value	Unit
Coefficient of linear thermal expansion (20–100°C)	–	13	1/K × 10 ⁻⁵
Thermal conductivity (23°C)	DIN 52 612	0.17	W/m·K
Maximum continuous operating temperature	–	150	°C
Minimum continuous operating temperature	–	-100	°C

Disclaimer:

Information contained in this data sheet is up-to-date and correct as at the date of issue. The given information is only informative and we cannot guarantee the accuracy nor can we take any accountability for the use of this information. The customer is responsible for the quality of products and has to test usage and processing to use. Some values are based on the datasheet of the supplier, internal tests and research. The values are guideline values that can be used for comparison for material selection.