

PTFE 25% GF

Mechanische, physikalische und thermische Eigenschaften

25 % clean milled fibres + 75 % virgin PTFE

properties	condition	standard	unit		unit	
colour				grey/ white		grey/ white
density/specific gravity	23 °C	DIN 53479	kg/m³	2210	g/cm³	2,21
hardness	23 °C	ISO 868	Shore D	60 ±3	Shore D	60 ±3
ball indentation hardness	23 °C	DIN 53456 H135/30	MPa	24 ±5	psi	3480 ±725
tensile strength	23 °C	ASTM D 4745-79	MPa	≥ 17	psi	≥ 2465
elongation at break	23 °C	ASTM D 4745-79	%	≥ 170	%	≥ 170
compressive strength	23 °C	DIN 53455	MPa	≥ 8	psi	≥ 1160
thermal conductivity		DIN 52612	$\frac{J \cdot 10^3}{m \cdot h \cdot K}$	≥ 1,3	$\frac{J \cdot 10^3}{m \cdot h \cdot K}$	≥ 1,3
coefficient of thermal expansion	25 °C - 200 °C		K-1 * 10-5	≥ 10,7	K-1 * 10-5	≥ 10,7
coefficient of friction *	23 °C		μ	≥ 0,16	μ	≥ 0,16
minimum service temperature			°C	-200	°F	-328
maximum service temperature			°C	260	°F	500
young's modulus	23 °C	DIN 53457	MPa	1320	psi	191500

* coefficient of friction dry dynamic Steel 16MnCr5 v=0,6m/s; p=0,05 MPa; t=5h

Chemical Properties

Filled PTFE

Resistant to almost all chemicals

Not resistant to halogenides, elemental fluorine, CF₃, molten alkali metals

Foodstuff applications: -