

PTFE TFM FDA **100% modified PTFE**
Mechanical, Physical and Thermal Properties

properties	condition	standard	unit		unit	
colour				white		white
density/specific gravity	23 °C	DIN 53479	kg/m ³	2150	g/cm ³	2,15
hardness	23 °C	ISO 868	Shore D	57 ± 3	Shore D	57 ± 3
ball indentation hardness	23 °C	DIN 53456 H 135/30	MPa	23 ± 5	psi	3335 ±725
tensile strength	23 °C	ASTM D 4745-79	MPa	≥ 30	psi	≥ 4350
elongation at break	23 °C	ASTM D 4745-79	%	≥ 400	%	≥ 400
compressive strength	23 °C	DIN 53455	MPa		psi	
thermal conductivity		DIN 52612	$\frac{J \cdot 10^3}{m \cdot h \cdot K}$	0,22	$\frac{J \cdot 10^3}{m \cdot h \cdot K}$	0,22
coefficient of thermal expansion	25 °C - 200 °C		K ⁻¹ * 10 ⁻⁵	12- 17*10 ⁻⁵	K ⁻¹ * 10 ⁻⁵	12- 17*10 ⁻⁵
coefficient of friction *	23 °C		μ		μ	
minimum service temperature			°C	-200	°F	-328
maximum service temperature			°C	260	°F	500
young's modulus	23 °C	DIN 53457	MPa	640	psi	92000

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

Chemical Properties

Resistant to almost all chemicals

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

Foodstuff applications FDA