

PTFE II

Mechanical, Physical and Thermal Properties

40 % bronze + 60 % virgin PTFE

properties	condition	standard	unit		unit	
colour				brown		brown
density/specific gravity	23 °C	DIN 53479	kg/m ³	3110	g/cm ³	3,11
hardness	23 °C	ISO 868	Shore D	60 ±3	Shore D	60 ±3
ball indentation hardness	23 °C	DIN 53456 H135/30	MPa	33 ±5	psi	4790 ±725
tensile strength	23 °C	ASTM D 4745-79	MPa	≥ 22	psi	≥ 3190
elongation at break	23 °C	ASTM D 4745-79	%	≥ 200	%	≥ 200
compressive strength	23 °C	DIN 53455	MPa	≥ 10	psi	≥ 1450
thermal conductivity		DIN 52612	$\frac{J^* 10^3}{m^* h^* K}$	≥ 4,0	$\frac{J^* 10^3}{m^* h^* K}$	≥ 4,0
coefficient of thermal expansion	25 °C - 200 °C		K ⁻¹ * 10 ⁻⁵	≥ 8	K ⁻¹ * 10 ⁻⁵	≥ 8
coefficient of friction *	23 °C		μ	0,13	μ	0,13
minimum service temperature			°C	-200	°F	-328
maximum service temperature			°C	260	°F	500
young's modulus	23 °C	DIN 53457	MPa	≥ 1375	psi	≥ 199500

* 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

Detailed information concerning chemical resistance see Chemical Resistance Guide

DUBLIN

John F. Kennedy Rd
John F. Kennedy Ind Est
Dublin D12 PD36

T: +353 (0)1 427 7900
F: +353 (0)1 450 8181
E: dublin@abbeyseals.ie

CORK

31B Euro Business Park
Little Island
Cork T45 X310

T: +353 (0)21 500 3555
F: +353 (0)21 500 3554
E: cork@abbeyseals.ie