

TKG® FLON 50INOX (PTFE + 50%INOX)

Density 3,41 g/cm³

Colour grey steel

Chemical Designation PTFE 50% (Polytetrafluorethylene) + Stainless steel AISI 316L 50%

PROPERTIES	RESULT	UNIT	PARAMETER	NORM USED
Mechanical properties				
Tensile strength	15 min.	MPa		ASTM D 4894
Tensile strength at yield	-	MPa	50 mm/min	DIN EN ISO 527-2
Elongation at yield	-	%	50 mm/min	DIN EN ISO 527-2
Elongation at break	150 min.	%		ASTM D 4894
Flexural strength	-	MPa	2 mm/min , 10 N	DIN EN ISO 178
Modulus of elasticity (flex test)	-	MPa	2 mm/min , 10 N	DIN EN ISO 178
Compression strength	-	MPa	1%	ASTM D 695
Deformation under load	6,0 – 7,5	%	140 Kg/cm ² for 24 h. at 23°C	ASTM D621
Coefficient of static friction	0,16 – 0,18			ASTM D1894
Coefficient of dynamic friction	0,13 – 0,15			ASTM D1894
Permanent deformation	2,50 – 3,50	%	after 24 h. relaxation at 23°C	ASTM D621
Hardness	65 min.	Shore D		ASTM D2240
Thermal properties				
Coeff. Linear thermal expansion	10,00 – 11,50	10 ⁻³ /°C	25-100°C long	ASTM D696
Glass transition temperature	-	°C		DIN 53765
Service temperature	-200 / +260 min.	°C	Short term	
Service temperature	-200 / +260	°C	Long term	
Electrical properties				
Radiations resistance	-		Gamma rays	low
Volume resistance	-	Ω*cm		ASTM D 527
Dielectric strength	-	kV / mm	In air	ASTM D 149
Dielectric constant	-		50 – 109 Hz	ASTM D 150
Miscellaneous properties				
Ageing and weatherability	-			
Resistance to hot mater / bases	-			
Resistance to weathering	-			
Flammability (UL94)	-		According to	DIN IEC 60995-11-10

MAIN CHARACTERISTICS

Improved compression resistance
 Low permeability
 Good dimensional stability

INDUSTRY APPLICATIONS

Dynamic applications with high compression and chemical resistance
 Bearings
 Seals for food industry machinery

Notice: The information given was made with our knowledge indicating our product's possible applications. Existing commercial patents must be observed. These values represent averages taken from samples, so we reserve the right of technical alterations. We cannot give a legally binding guarantee of certain properties or the suitability for a specific application. The customer is solely responsible for the quality and suitability of products for the application and has to test usage and processing prior to use. Data sheet values are subject to periodic review, the most recent update can be found at www.traidvillarroya.com. Traidamid, TKG and TVH as well as their logos are registered trademarks of the Traid Villarroja group of companies, in Europe and other countries.