

TKG® FLON 15CER (PTFE + 15% CERAMIC)

Density 2,27 g/cm³

Colour Clear grey

Chemical Designation PTFE 85% (Polytetrafluorethylene) + Ceramic 15%

PROPERTIES	RESULT	UNIT	PARAMETER	NORM USED
Mechanical properties				
Tensile strength	18 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	10,00 – 12,00	%	140 Kg/cm ² for 24 h. at 23°C	ASTM D621
Coefficient of static friction	0,30 – 0,32			ASTM D1894
Coefficient of dynamic friction	0,28 – 0,30			ASTM D1894
Permanent deformation	5,0 – 7,0	%	after 24 h. relaxation at 23°C	ASTM D621
Hardness	62 min.	Shore D		ASTM D2240
Thermal properties				
Coeff. Linear thermal expansion	-	10 ⁻⁵ /°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	10 ¹⁵	Ω*cm		ASTM D 257
Dielectric strength	20 - 25	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

Great dielectric characteristics
 Improved compression resistance
 Very good where thermal barriers are required

INDUSTRY APPLICATIONS

Electrical applications for switches and insulators

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 Villarroya group of companies, in Europe and other countries.