

TKG® FLON 15GR (PTFE + 15%GRAPHITE)

Density 2,19 g/cm³

Colour Black

Chemical Designation PTFE 85% (Polytetrafluorethylene) + Graphite 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	200 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	9,50 – 11	%	140 Kg/cm ² for 24 h. at 23°C	ASTM D621	
Coefficient of static friction	0,12 – 0,14			ASTM D1894	
Coefficient of dynamic friction	0,09 – 0,11			ASTM D1894	
Permanent deformation	5,0 – 5,5	%	after 24 h. relaxation at 23°C	ASTM D621	
Hardness	55 min.	Shore D		ASTM D2240	
Thermal properties					
Coeff. Linear thermal expansion	8,0 – 13,5	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 ⁹	Ω*cm		ASTM D 257	
Dielectric strength	-	kV / mm	In air	ASTM D 149	
Dielectric constant	-		50 – 109 Hz	ASTM D 150	
Miscellaneous properties					
Ageing and weatherability	Stable over 20 years exposure				
Resistance to hot mater / bases	-				
Resistance to weathering	-				
Flammability (UL94)	-			According to	DIN IEC 60995-11-10

MAIN CHARACTERISTICS

Great thermal conductivity
 Low permeability
 Low coefficient of friction
 Good self-lubricant

INDUSTRY APPLICATIONS

Dynamic seal applications
 Steering applications
 Shock absorber gaskets for light and heavy duty vehicle applications

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.