

## TKG® FLON 15GR (PTFE + 15%GRAPHITE)

**Density** 2,19 g/cm<sup>3</sup>

**Colour** Black

**Chemical Designation** PTFE 85% ( Polytetrafluorethylene) + Graphite 15%

PROPERTIES	RESULT	UNIT	PARAMETER	NORM USED
<b><u>Mechanical properties</u></b>				
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 <sup>2</sup> 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
<b><u>Thermal properties</u></b>				
Coeff. Linear thermal expansion	8,0 – 13,5	10 <sup>-5</sup> /°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	
<b><u>Electrical properties</u></b>				
Radiations resistance	-		Gamma rays	low
Volume resistance	10 <sup>9</sup>	Ω*cm		ASTM D 257
Dielectric strength	-	kV / mm	In air	ASTM D 149
Dielectric constant	-		50 – 109 Hz	ASTM D 150
<b><u>Miscellaneous properties</u></b>				
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