

TKGR FLON (PTFE)

Density 2,13 – 2,18 g/cm³

Colour White opaque

Chemical Designation PTFE (Polytetrafluorethylene)

PROPERTIES	RESULT	UNIT	PARAMETER	NORM USED
Mechanical properties				
Tensile strength	20 minimum	MPa	-	ASTM D 4894
Elongation at break	200 minimum	%	-	ASTM D 4894
Hardness	54 minimum	Shore D	-	ISO 13000-2
Compression strength	Compression strength	Kg/cm ²	1%	-
Ball indentation hardness	Ball indentation hardness	MPa	-	ISO 13000-2
Deformation under load	10 – 13	%	%	ASTM D621
Deformation under load	6 – 7,5	%	After 24 hour relaxation 23oC	ASTM D621
Coefficient of static friction	0,08 – 0,10			ASTM D1894
ASTM D1894	0,06 – 0,08			ASTM D1894
Thermal properties				
Service temperature	-200 / +260	oC	Short term	
Service temperature	-200 / +260	oC	Long term	
Thermal conductivity	0,24	W / (k*m)		ASTM C 177
Electrical properties				
Specific volume resistivity	10 ¹⁸	Ω*cm		ASTM D 257
Dielectric strength	20 – 70	kV / mm	In air	ASTM D 149
Dielectric constant	2,1		60 Hz to 2GHz	ASTM D 150
Miscellaneous properties				
Water absorption	Less than 0,01	%	23oC	ASTM D 570
Resistance to hot mater / bases	-			
Resistance to weathering	-			
Flammability (UL94)	VE - 0		According to	DIN IEC 60995-11-10

MAIN CHARACTERISTICS

Excellent resistance to continuous service temperature up to 260oC.

Satisfactory low temperature resistance as low as -200oC.

Excellent chemical resistance

Excellent electrical insulation

Good slide and wear resistance

Excellent slide and wear properties

INDUSTRY APPLICATIONS

Automotive industry

Conveyor technology

Chemical plant engineering

Electrical and precision engineering

Food engineering

Medical industry

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.