

Perfluoralkoxy-copolymer (PFA)

We use this material in the following process(es):

Injection moulding.

Injection moulded parts up to 16.000 g

Material number		1611	
Density	ISO 1183	2,15	g/cm ³

Mechanical properties

Stress at yield	ISO 527	31	MPa
Elongation at break	ISO 527	300	%
Tensile modulus	ISO 527	690 ¹⁹⁾	MPa
Hardness Shore (A/D) or Rockwell (R/L/M)	ISO 868, ISO 2039-2	D60	-

Electrical properties

Dielectric constant at 50 Hz	IEC 60250	2,1	-
Dielectric constant at 1 MHz	IEC 60250	2,1	-
Dissipation factor at 50 Hz	IEC 60250	<1	1E-4
Dissipation factor at 1 MHz	IEC 60250	2	1E-4
Dielectric strength	IEC 60243-1	20 ³⁾	kV/mm
Thickness for electric strength		3,2	mm
Volume resistivity	IEC 60093	>10¹⁶	Ohm · m
Surface resistivity	IEC 60093	>10¹⁷	Ohm

Thermal properties

Thermal conductance	DIN 52 612	0,22	W/K m
Linear thermal expansion along cross to direction of flow	ISO 11359	130-200	10 ⁻⁶ /K
Melting point or glass transition temp.	ISO 11357	305	°C
Heat distortion temperature A	ISO 75 HDT/A (1.8 MPa)	na	°C
Short time use temperature		280	°C
Continuous use temperature		260	°C
Minimal use temperature		-200	°C

Other properties

Humidity absorption at 23°C/50%	ISO 62	<0,1	%
Water absorption	ISO 62	<0,1	%
Flammability UL 94	IEC 60695-11-10	V-0	-
Transparency (opaque/translucent/clear)	tl		
Raw material	Teflon PFA (Du Pont)		

³⁾ : measured according to ASTM

¹⁹⁾ : flexural modulus

na: not applicable

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The figures in this datasheet are guide values. The values are affected by processing conditions, modifications, additives and environmental conditions and they do not release you from the obligation to check the validity and to undertake tests on your own. The information given is based on our state of knowledge. The material data is not to be construed as guaranteeing specific properties and the data can not be used to deduce the suitability for a particular application.

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Kern GmbH
Technische Kunststoffteile
Clemens-Kern-Straße 1
D-56276 Großmaischeld

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Postfach 20, D-56272 Großmaischeld, Deutschland, info@kern-gmbh.de

