

Perfluoroalkoxy

PFA / Material properties

High-purity, non-reactive fluoropolymer with outstanding chemical resistance, low friction, and stable electrical insulation.

Key specifications

ITEM	VALUE
Continuous Use Temperature	260 °C / 500 °F
UL 94 Flame Rating	V-0
Density	2.15 g/cm³

Typical material properties

PROPERTY	TEST METHOD	TYPICAL VALUE	UNIT
Tensile strength (23 °C)	ISO 527	25-35	MPa
Tensile modulus (23 °C)	ISO 527	0.45-0.70	GPa
Elongation at break	ISO 527	200-350	%
Melting temperature	ISO 11357	302-310	°C
HDT (0.46 MPa, grade dependent)	ISO 75	70-92	°C
Thermal conductivity	-	0.20-0.25	W/(m·K)
CTE (linear)	-	120-160	µm/(m·°C)
Dielectric strength (0.25 mm film)	ASTM D149	80	kV/mm
Relative permittivity (1 MHz)	IEC 60250	2.03-2.10	-
Dissipation factor (1 MHz)	IEC 60250	< 0.0002	-
Volume resistivity (dry)	IEC 60093	≥ 1×10 ¹⁸	Ω·cm
Coefficient of friction (static, vs polished steel)	-	approx. 0.05	-
Water absorption (24 h)	ISO 62	≈ 0.0	%

Values are typical reference data for guidance only and are not guaranteed.