

Technical Data Sheet

EtroX[®] V natural

PEEK

Typical characteristics

- Good machinability
- Low burring
- Low moisture absorption
- Good dimensional stability

Typical industries

- Clean-Room Technology
- Electronics
- Mechanical Engineering Industry
- Semiconductor Industry
- Semiconductor Front-End applications
- Semiconductor Back-End applications
- Semiconductor High and low temperature

	Test method	Unit	Guideline value
General properties			
Density	DIN EN ISO 1183-1	g / cm ³	1,62
Water absorption	DIN EN ISO 62	%	0,15
Mechanical properties			
Yield stress	DIN EN ISO 527	MPa	105
Elongation at break	DIN EN ISO 527	%	2,5
Tensile modulus of elasticity	DIN EN ISO 527	MPa	5300
Notched impact strength	ISO 179-1/1eA	kJ / m ²	1,0
Shore hardness	DIN EN ISO 868	scale D	88
Ball indentation hardness	DIN EN ISO 2039-1	MPa	275
Thermal properties			
Melting temperature	ISO 11357-3	°C	341
Thermal conductivity	ISO 22007-4	W / (m * K)	0,44
Service temperature, long term	Average	°C	-30 ... 250
Service temperature, short term (max.)	Average	°C	310
Electrical properties			



	Test method	Unit	Guideline value
Volume resistivity	DIN EN 62631-3-1	$\Omega \cdot \text{cm}$	$>10^{12}$
Surface resistivity	DIN EN 62631-3-2	Ω	$>10^{12}$
Comparative tracking index	IEC 60112		150
Dielectric strength	IEC 60243	kV / mm	35
Dielectric constant @ 50Hz	DIN EN IEC 62631-2-1		4,9
Dielectric constant @ 1MHz	DIN EN IEC 62631-2-1		4,9
Dielectric dissipation factor (50 Hz)	DIN EN IEC 62631-2-1		0,04
Dielectric dissipation factor (1 MHz)	DIN EN IEC 62631-2-1		0,0007

