

Material Data Sheet

PEEK ESD | PEEK Anti-static

- offers the advanced properties of PEEK partnered with excellent resistance to static.

Feature

- Surface resistivity of 13×10^6 and $1 \times 10^9 \Omega/\text{sq}$
- Dissipative range of $10^6 - 10^9 \text{ ohms/sq}$
- High structural strength and stiffness
- Excellent dimensional stability
- High Temperature Resistance

Applications

- Critical test fixture applications
- Wafer handling
- Structural applications in wet process tools where static dissipation is important
- sensitive circuits, circuit boards and hard drive disks
- Components in high-speed electronic printing

Physical Properties			
Density	ISO 1183-1	g/cm ³	1.43
Water absorption	ISO 62	%	0.2
Mechanical Properties			
Tensile strength	ISO 527-2	Mpa	110
Elongation at Break	ISO 527-2	%	20
Tensile Modulus of elasticity	ISO 527	Mpa	3800
Notched Impact Strength(charpy)	ISO 179	KJ/m ²	8.2
Ball-indentation Hardness	ISO2039-1	Mpa	218
Hardness	DIN 53505	Shore D	88
Thermal Properties			
Melting temperature	ISO11357-3	°C	343
Thermal conductivity	DIN52612-1	W/(m*K)	0.25
Thermal capacity	DIN52612	KJ/(kg*K)	1.34
Coefficient of linear thermal expansion	DIN53752	10 ⁻⁶ K ⁻¹	50
Service temperature - long term	-	°C	-40 ~ 260
Service temperature - short term	-	°C	310
Heat deflection temperature	DIN EN ISO 75	°C	152
Electrical Properties			
Surface Resistivity	VDE0303	ohms	10 ⁶⁻⁹
Volume Resistivity	VDE0303	ohms.cm	10 ⁶⁻⁹
Dielectric Constant	DIN53483		3.2
Dielectric Loss Coefficient	DIN53483		0.003
Dielectric strength	VDE0303	kV/mm	19
Miscellaneous Data			
Flammability	UL94		V0

NOTE:

*The data stated above are typical values intended for reference and comparison purposes only.

*The data should not be used as a basis for design specifications or quality control.

*The information is provided as a guide to the best of our knowledge and given without obligation or liability.

*Testing under individual application circumstances is recommended.