

APSOplast® PEEK SL
**Engineering Plastic Technology
Technical Data Sheet**
Application purpose and characteristics

Mechanical engineering, conveyor industry, precision and electrical engineering
Excellent "stick-slip" behavior, high strength, high dimensional stability

Product description

Material name, long description	Polyether ether ketone
Material name, short description	PEEK
Material Code	PEEK SL.001-00
Density	1.46 g/cm ³

Mechanical characteristics

Charpy impact strength	Test value: 5.0 kJ/m ² Test norm: DIN EN ISO 179
Ball indentation hardness	Test value: 220 MPa Test norm: DIN ISO 2039-1
Elongation at break	Test value: 4 % Test norm: DIN EN ISO 527
Shore hardness	Test value: 85 Shore D Test norm: DIN EN ISO 868
Yield stress	Test value: 75 MPa Test norm: DIN EN ISO 527
Modulus of elasticity and tension	Test value: 4900 MPa Test norm: DIN EN ISO 527

Thermal characteristics

Min. operating temperature	Test value: -30 °C
Max. operating temperature long term	Test value: 250 °C
Max. operating temperature short term	Test value: 310 °C
Coefficient of linear thermal expansion	Test value: 30 10 ⁻⁶ K ⁻¹ Test norm: DIN 53752
Crystalline melting point	Test value: 343 °C Test norm: ISO 11357-3
Heat deflection temperature	Test value: 293 °C Test norm: DIN EN ISO 75 / A
Thermal conductivity	Test value: 0.24 W/m·K Test norm: DIN 52612-1

Electrical characteristics

Volume resistivity	Test value: 10 ⁷ - 10 ⁹ Ohm·cm Test norm: IEC 60093
Surface resistivity	Test value: 10 ⁷ - 10 ⁹ Ohm Test norm: IEC 60093

Other characteristics

Flammability	Test value: V0 / V0 Test norm: UL 94
Moisture absorption	Test value: 0.15 % Test norm: DIN EN ISO 62