

APSOplast® PPS GF SL dark blue
**Engineering Plastic Technology
Technical Data Sheet**
Product description

Material name, long description	Polyphenylene sulfide
Material name, short description	PPS
Material Code	PPS GF SL.004-00
Color	dark blue
Density	1.42 g/cm ³

Mechanical characteristics

Elongation at break	Test value: 3.5 % Test norm: ISO 527-1,-2
Charpy impact strength	Test value: 4 kJ/m ² Test norm: ISO 179-1/1eA Test parameter: Charpy
Ball indentation hardness	Test value: 160 N/mm ² Test norm: ISO 2039-1
Impact strength	Test value: 25 kJ/m ² Test norm: ISO 179-1/1eU Test parameter: Charpy
Elongation at yield	Test value: OSP - Test norm: ISO 527-1,-2
Yield stress	Test value: 78 MPa Test norm: ISO 527-1,-2
Modulus of elasticity and tension	Test value: 4000 MPa Test norm: ISO 527-1,-2
Tensile strength	Test value: 78 MPa Test norm: ISO 527-1,-2

Thermal characteristics

Min. operating temperature	Test value: -20 °C
Max. operating temperature long term	Test value: 220 °C Test parameter: während mindestens 20000 h
Max. operating temperature short term	Test value: 260 °C
Crystalline melting point	Test value: 280 °C Test norm: ISO 11357-1,-3 Test parameter: DSC, 10 °C/min

Thermal expansion

Heat deflection temperature	Test value: 115 °C Test norm: ISO 75-1,-2 Test parameter: Methode A: 1.8 MPa
Thermal conductivity	Test value: 0.3 W/m·K Test parameter: 23 °C

Electrical characteristics

Dielectric loss factor	Test value: 0.003 Test norm: DIN IEC 60250 Test parameter: 100 Hz / 1 MHz
Dielectric constant	Test value: 3.3 Test norm: IEC 60250 Test parameter: 100 Hz / 1 MHz
Dielectric strength	Test value: 24 kV/mm Test norm: IEC 60243-1
Volume resistivity	Test value: > 10 ¹⁴ Ohm·cm Test norm: IEC 60093
Surface resistivity	Test value: > 10 ¹³ Ohm
Comparative tracking index	Test value: 100 Test norm: IEC 60112 Test parameter: CTI

Other characteristics

Flammability	Test value: 44 % Test norm: ISO 4589-1, -2 Test parameter: Oxygen index
	Test value: V-0 / V-0 Test norm: UL 94 Test parameter: Thickness 1.5 / 3 mm
Moisture absorption	Test value: 0.05 % Test parameter: at saturation in norm climate 23 °C / 50 % RF
Water absorption at saturation	Test value: 0.2 % Test parameter: Saturation in water 23 °C