

Technical Data Sheet

Sustanat[®] PC black

PC

Typical characteristics

- Low moisture absorption
- High stiffness
- High hardness
- High heat deflection temperature
- Good formability
- Electrically insulating
- Good impact strength

Typical industries

- Mechanical Engineering Industry
- Electronics

	Test method	Unit	Guideline value
General properties			
Density	DIN EN ISO 1183-1	g / cm ³	1,20
Water absorption	DIN EN ISO 62	%	0,2
Flammability (Thickness 3 mm / 6 mm)	UL 94		HB / HB
Mechanical properties			
Yield stress	DIN EN ISO 527	MPa	65
Elongation at break	DIN EN ISO 527	%	80
Tensile modulus of elasticity	DIN EN ISO 527	MPa	2300
Notched impact strength	DIN EN ISO 179	kJ / m ²	20
Shore hardness	DIN EN ISO 868	scale D	82
Thermal properties			
Melting temperature	ISO 11357-3	°C	-
Glass transition temperature	ISO 11357-3	°C	150
Thermal conductivity	DIN 52612-1	W / (m * K)	0,21
Thermal capacity	DIN 52612	kJ / (kg * K)	1,20
Coefficient of linear thermal expansion	DIN 53752	10 ⁻⁶ / K	70
Service temperature, long term	Average	°C	-40 ... 115
Service temperature, short term (max.)	Average	°C	140
Heat deflection temperature	DIN EN ISO 75, Verf. A, HDT	°C	135



	Test method	Unit	Guideline value
Electrical properties			
Dielectric constant	IEC 60250		3
Dielectric dissipation factor (50 Hz)	IEC 60250		0,001
Volume resistivity	DIN EN 62631-3-1	$\Omega \cdot \text{cm}$	10^{15}
Surface resistivity	DIN EN 62631-3-2	Ω	10^{15}
Comparative tracking index	IEC 60112		275
Dielectric strength	IEC 60243	kV / mm	30

