Technical Data Sheet

Sustadur® PET black

PET

Typical characteristics

- Low moisture absorption
- Good creep properties
- Good sliding properties
- High tensile strength
- High stiffness
- Good machinability
- Low coefficient of thermal expansion
- Good dimensional stability
- Good wear resistance

Typical industries

- Mechanical Engineering Industry
- Conveyor Technology & Automation
- Electronics
- Vehicle Construction
- Food Industry
- Meat, Fish and Poultry Processing
- Bakery and Confectionery
- Beverage Industry

	Test method	Unit	Guideline value
General properties			
Density	DIN EN ISO 1183-1	g / cm^3	1,38
Water absorption	DIN EN ISO 62	%	0,3
Flammability (Thickness 3 mm / 6 mm)	UL 94		HB / HB
Mechanical properties			
Yield stress	DIN EN ISO 527	MPa	85
Elongation at break	DIN EN ISO 527	%	15
Tensile modulus of elasticity	DIN EN ISO 527	MPa	3000
Notched impact strength	DIN EN ISO 179	kJ / m^2	2
Shore hardness	DIN EN ISO 868	scale D	84
Thermal properties			
Melting temperature	ISO 11357-3	°C	248
Thermal conductivity	DIN 52612-1	W / (m * K)	0,28
Thermal capacity	DIN 52612	kJ / (kg * K)	1,10
Coefficient of linear thermal expansion	DIN 53752	10^{-6} / K	60
Service temperature, long term	Average	°C	-20 ... 115
Service temperature, short term (max.)	Average	°C	180

	Test method	Unit	Guideline value
Heat deflection temperature	DIN EN ISO 75, Verf. A, HDT	°C	80
Electrical properties			
Dielectric constant	IEC 60250		3,4
Dielectric dissipation factor (50 Hz)	IEC 60250		0,001
Volume resistivity	DIN EN 62631-3-1	Ω * cm	10^{18}
Surface resistivity	DIN EN 62631-3-2	Ω	10^{16}
Comparative tracking index	IEC 60112		600
Dielectric strength	IEC 60243	kV / mm	20