

Technical Data Sheet

Sustadur[®] PET GLD 120 grey

PET

Typical characteristics

Typical industries

- Good sliding properties
- Good wear properties
- High stiffness
- Good dimensional stability
- 电子
- 输送机技术和自动化
- 机械工程行业

		Test method	Unit	Guideline value
General properties				
Density		DIN EN ISO 1183-1	g / cm ³	1,41
Water absorption		DIN EN ISO 62	%	0,2
Flammability		UL 94		НВ
Mechanical properties				
Yield stress		DIN EN ISO 527	MPa	77
Elongation at break		DIN EN ISO 527	%	4
Tensile modulus of elasticity		DIN EN ISO 527	MPa	3100
Impact strength		DIN EN ISO 179	kJ / m ²	20
Notched impact strength		DIN EN ISO 179	kJ / m ²	2
Shore hardness		DIN EN ISO 868	scale D	80
Thermal properties				
Melting temperature		ISO 11357-3	°C	248
Thermal conductivity		DIN 52612-1	W / (m * K)	0,28
Service temperature, long term		Average	°C	-20 115
Service temperature, short term (max.)		Average	°C	180
Heat deflection temperature		DIN EN ISO 75, Verf. A, HDT	°C	75
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

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Röchling

Industrial

	Test method	Unit	Guideline value
Surface resistivity	DIN EN 62631-3-2	Ω	10 ¹⁶
Comparative tracking index	IEC 60112		600
Dielectric strength	IEC 60243	kV / mm	20

The short-term maximum application temperature only applies to very low mechanical stress for a few hours. The long-term maximum application temperature is based on the thermal ageing of plastics by oxidation, resulting in a decrease of the mechanical properties. This applies to an exposure to temperatures for at least 5.000 hours causing a 50% loss of the tensile strength from the original value (measured at room temperature). This value says nothing about the mechanical strength of the material at high application temperatures. In case of thick-walled parts, only the surface layer is affected by oxidation from high temperatures. With the addition of antioxidants, a better protection of the surface layer is achieved. In any case, the center area of the material remains unaffected. The minimum application temperature is basically influenced by possible stress factors like impact and/or shock under application. The values stated refer to an minimum degree of impact stress. The electrical properties as stated result from measurements on natural, dry material. With other colours (in particular black) or saturated material, there may be clear differences in the electrical properties. The data stated above are average values ascertained by statistical tests on a regular basis. They are in accordance with DIN EN 15860. They serve as information about our products and are presented as a guide to choose from our range of materials. This, however, does not include an assurance of specific properties or the suitability for particular application purposes that are legally binding. Since the properties also depend on the dimension of the semi-finished products and the degree of crystallization (e.g. nucleating by pigments), the actual values of the properties of a particular product may differ from the indicated values.

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