

Technical Data Sheet

Sustamid® 46 brown

PA 46

Typical characteristics

- High continuous service temperature
- High heat deflection temperature
- High absorption of moisture of up to 3.5 % in standard atmosphere
- High abrasion resistance
- High stiffness
- High tensile strength
- Good notched-bar impact strength
- Good machinability
- good adhesive properties
- Good weldability
- Good sliding properties

Typical industries

- Electronics
- Mechanical Engineering Industry
- Aerospace

	Test method	Unit	Guideline value
General properties			
Density	DIN EN ISO 1183-1	g / cm ³	1,18
Water absorption	DIN EN ISO 62	%	3,7
Flammability (Thickness 3 mm / 6 mm)	UL 94		HB / HB
Mechanical properties			
Yield stress	DIN EN ISO 527	MPa	95
Elongation at break	DIN EN ISO 527	%	30
Tensile modulus of elasticity	DIN EN ISO 527	MPa	3100
Notched impact strength	DIN EN ISO 179	kJ / m ²	6
Shore hardness	DIN EN ISO 868	scale D	84
Thermal properties			
Melting temperature	ISO 11357-3	°C	295
Thermal conductivity	DIN 52612-1	W / (m * K)	0,3



	Test method	Unit	Guideline value
Coefficient of linear thermal expansion	DIN 53752	$10^{-6} / K$	80
Service temperature, long term	Average	°C	-40 ... 135
Service temperature, short term (max.)	Average	°C	200
Heat deflection temperature	DIN EN ISO 75, Verf. A, HDT	°C	160
Electrical properties			
Dielectric constant	IEC 60250		3,8
Dielectric dissipation factor (50 Hz)	IEC 60250		0,13
Volume resistivity	DIN EN 62631-3-1	$\Omega \cdot cm$	10^{15}
Surface resistivity	DIN EN 62631-3-2	Ω	10^{16}
Comparative tracking index	IEC 60112		400
Dielectric strength	IEC 60243	kV / mm	22

