

Material datasheet

Material: PAS-PC

mechanical characteristics

Characteristic	Standard	Unit	Value
Yield strain (dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	%	6
Tensile strength (+23°C, dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	MPa (N/mm ²)	69
Tensile E-modulus (+23°C, dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	MPa (N/mm ²)	2300
Charpy impact strength (+23°C, dry)	ISO 179 DIN 53453	kJ/m ²	No Break
Coefficient of sliding friction (p = 0.3N/mm ² / 0.6N/mm ² , v = 0.27m/s, against steel hardened and ground, dry)			0.55

thermal characteristics

Characteristic	Standard	Unit	Value
min. Operating temperature (continuous)		°C	-30
max. service temperature (continuous)		°C	110
Heat deflection temperature HDT/A (1.8 N/mm ²)	ISO 75-1/-2 DIN 53461 ASTM D 648	°C	132
Thermal conductivity (+23°C)	DIN 52612	W/(m×K)	0.21

combustibility characteristics

Characteristic	Standard	Unit	Value
UL94 flammability	IEC 60695-11-10	class	V-2

electrical characteristics

Characteristic	Standard	Unit	Value
Dielectric constant, relative permittivity (1 MHz, dry)	DIN IEC 60250 (DIN VDE 0303-4) ASTM D 150		2.9
Dielectric loss factor (1 MHz, dry)	DIN IEC 60250 (DIN VDE 0303-4) ASTM D 150		0.01
Surface resistivity (dry)	DIN IEC 60093 (DIN VDE 0303-30) ASTM D 257	Ω	10 ¹⁶

physical characteristics

Characteristic	Standard	Unit	Value
Density, Gross density	ISO 1183 DIN 53479 ASTM D 792	g/cm ³	1,2

chemical characteristics

Characteristic	Standard	Unit	Value
UV light and weathering			unstable
Physiology	Faigle		unsuitable