

Material datasheet

Material: PAS-PC Sunlife

mechanical characteristics

Characteristic	Standard	Unit	Value
Yield stress (+23°C, dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	MPa (N/mm ²)	60
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)	70
Tensile E-modulus (+23°C, dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	MPa (N/mm ²)	2300
Max. permissible pressure load (continuous)	Faigle	MPa (N/mm ²)	15

thermal characteristics

Characteristic	Standard	Unit	Value
min. Operating temperature (continuous)		°C	-50
max. service temperature (continuous)		°C	120
max. service temperature (short-term)		°C	140
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)	0.2

combustibility characteristics

Characteristic	Standard	Unit	Value
UL94 flammability	IEC 60695-11-10	class	V2

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		0.1
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			constant
Physiology	Faigle		unsuitable