

Material datasheet

Material: PAS-PA GF50

mechanical characteristics

Characteristic	Standard	Unit	Value
Tensile stress at break (+23°C, dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	MPa (N/mm ²)	215
Elongation at break (+23°C, dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	%	3
Tensile E-modulus (+23°C, dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	MPa (N/mm ²)	16000
Max. permissible pressure load (continuous)	Faigle	MPa (N/mm ²)	37
Charpy notched impact strength (+23°C, dry)	ISO 179 DIN 53453	kJ/m ²	16

thermal characteristics

Characteristic	Standard	Unit	Value
min. Operating temperature (continuous)		°C	-30
max. service temperature (continuous)		°C	110
max. service temperature (short-term)		°C	180

combustibility characteristics

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

electrical characteristics

Characteristic	Standard	Unit	Value
Surface resistivity (dry)	DIN IEC 60093 (DIN VDE 0303-30) ASTM D 257	Ω	10 ¹³

These data are guideline values which are subject to change depending on the type of manufacture of the test specimens and stress. These data are based on our own experience and on manufacturer's data. However, they are provided without guarantee, since each application is different and must be considered with reference to its specific influence parameters.

physical characteristics

Characteristic	Standard	Unit	Value
Density, Gross density	ISO 1183 DIN 53479 ASTM D 792	g/cm ³	1.57
Moisture absorption at saturation - standard climate (23°C, 50% RF)	ISO 62 ISO 1110	%	1.4