

Material datasheet

Material: PAS-PAI 4203 + 4503

mechanical characteristics

Characteristic	Standard	Unit	Value
Yield stress (+23°C, dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	MPa (N/mm ²)	150
Yield strain (dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	%	9
Tensile E-modulus (+23°C, dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	MPa (N/mm ²)	4200
Charpy notched impact strength (+23°C, dry)	ISO 179/1eA	kJ/m ²	15
Ball indentation hardness (dry)	ISO 2039-1	MPa (N/mm ²)	200

thermal characteristics

Characteristic	Standard	Unit	Value
min. Operating temperature (continuous)		°C	-50
max. service temperature (continuous)		°C	250
max. service temperature (short-term)		°C	270
Heat deflection temperature HDT/A (1.8 N/mm ²)	ISO 75-1/-2 DIN 53461 ASTM D 648	°C	280
Coefficient of linear thermal expansion (23 - 60°C)	ISO 11359	10 ⁻⁶ /K	30
Thermal conductivity (+23°C)	DIN 52612	W/(m×K)	0.26

combustibility characteristics

Characteristic	Standard	Unit	Value
UL94 flammability	IEC 60695-11-10	class	V0

electrical characteristics

Characteristic	Standard	Unit	Value
Dielectric constant, relative permittivity (1 MHz, dry)	DIN IEC 60250 (DIN VDE 0303-4) ASTM D 150		3.9
Dielectric loss factor (1 MHz, dry)	DIN IEC 60250 (DIN VDE 0303-4) ASTM D 150		0.031
Surface resistivity (dry)	DIN IEC 60093 (DIN VDE 0303-30) ASTM D 257	Ω	10 ¹³

physical characteristics

Characteristic	Standard	Unit	Value
Density, Gross density	ISO 1183 DIN 53479 ASTM D 792	g/cm ³	1.41