

Data Sheet

Material: PAS-100

Mechanical characteristics

Characteristics	Standard	Unit	Dry / humid
Yild Stress [sY] (+23°C)	ISO 527-1/-2 DIN 53455 ASTM D 638	MPa (N/mm ²)	25
Yield Strain [eY]	ISO 527-1/-2 DIN 53455 ASTM D 638	%	20
Tensile Stress at Break [sB] (+23°C)	ISO 527-1/-2 DIN 53455 ASTM D 638	MPa (N/mm ²)	40
Tensile Stress at Break [eB] (+23°C)	ISO 527-1/-2 DIN 53455 ASTM D 638	%	>50
Tensile Modulus [Et] (+23°C)	ISO 527-1/-2 DIN 53457 ASTM D 638	MPa (N/mm ²)	400
Charpy-Impact Strength [acU] (+23°C)	ISO 179 DIN 53453	kJ/m ²	NB
Charpy-Impact Strength [acU] (-30°C)	Iso 179/1eU	KJ/m ²	NB
Charpy-Notched Strength [acN] (+23°C)	ISO 179 DIN 53453	kJ/m ²	NB
Charpy-Notsched Strength [acN] (-30°C)	ISO 179/1eA	kJ/m ²	4
Shore Hardness (standard A/D) (Durometer)	ISO 868 ASTM D 1706 ASTM D 2240	-	65D

Thermal characteristics

Characteristics	Standard	Unit	Dry / humid
Crystallite melting point	DIN 53765	°C	178
Min. service temp. (long time)	-	°C	-70
max. service temp. (long time)	-	°C	80
max. service temp. (short time)	-	°C	100
Hea6t Deflection Temp. [HDT/A]	ISO 75-1/-2 DIN 53461 ASTM D 648	°C	45
Coeff. of Thermal Expansion (23 - 60°C)	ISO 11359	10 ⁻⁶ /K	140-180

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combustibility characteristics

Characteristics	Standard	Unit	Dry / humid
Flammability acc. UL94	IEC 60695-11-10	Class	HB

electrical characteristics

Characteristics	Standard	Unit	Dry / humid
Dielectric Constant [ε] (1 MHz)	DIN IEC 60250 (DIN VDE 0303-4) ASTM D 150	-	4
Dissipation Factor [tan δ] (1 MHz)	DIN IEC 60250 (DIN VDE 0303-4) ASTM D 150	-	0,013
Volume Resistivity	DIN IEC 60093 (DIN VDE 0303-30) ASTM D 257	Ω*cm	-/ 10 ¹¹
Surface Resistivity	DIN IEC 60093 (DIN VDE 0303-30) ASTM D 257	Ω	-/ 10 ¹¹
Comp. Fig. Creep. Dist. [CTI]	DIN IEC 60112 (DIN VDE 0303-1)	-	-/ 600
Dielectric Strength [EB1]	DIN EN 60243-1 (DIN VDE 0303-22)	kV/mm	-/ 32

physical characteristics

Characteristics	Standard	Unit	Dry / humid
density	ISO 1183 DIN 53479 ASTM D 792	g/cm ³	1,03
Moisture absorption (23°C, 50% RF)	ISO 62	%	1,4
Water absorption at saturation 23°C	ISO 62 DIN 53495 ASTM D 570	%	0,7

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