

Material datasheet Material: PAS-PVDF

mechanical characteristics

Characteristic	Standard	Unit	Value
Yield stress (+23°C, dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	MPa (N/mm ²)	58
Yield strain (dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	%	17
Tensile strength (+23°C, dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	MPa (N/mm ²)	46
Tensile E-modulus (+23°C, dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	MPa (N/mm ²)	2125
Max. permissible pressure load (continuous)	Faigle	MPa (N/mm ²)	13
Charpy impact strength (+23°C, dry)	ISO 179 DIN 53453	kJ/m ²	No Break
Charpy notched impact strength (+23°C, dry)	ISO 179 DIN 53453	kJ/m ²	12
Ball indentation hardness (dry)	ISO 2039-1	MPa (N/mm ²)	120
Coefficient of sliding friction (p = 0.3N/mm ² / 0.6N/mm ² , v = 0.27m/s, against steel hardened and ground, dry)			0.27

thermal characteristics

Characteristic	Standard	Unit	Value
min. Operating temperature (continuous)		°C	-30
max. service temperature (continuous)		°C	150

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		7
Dielectric loss factor (1 MHz, dry)	DIN IEC 60250 (DIN VDE 0303-4) ASTM D 150		0.24
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	1.78
Moisture absorption at saturation - standard climate (23°C, 50% RF)	ISO 62 ISO 1110	%	0.01

chemical characteristics

Characteristic	Standard	Unit	Value
UV light and weathering			constant
Physiology	Faigle		suitable