

Material datasheet

Material: PAS-PMMA GS

mechanical characteristics

Characteristic	Standard	Unit	Value
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)	75
Tensile E-modulus (+23°C, dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	MPa (N/mm ²)	3400
Charpy impact strength (+23°C, dry)	ISO 179 DIN 53453	kJ/m ²	17
Charpy notched impact strength (+23°C, dry)	ISO 179 DIN 53453	kJ/m ²	2

thermal characteristics

Characteristic	Standard	Unit	Value
max. service temperature (continuous)		°C	80
max. service temperature (short-term)		°C	90
Heat deflection temperature HDT/A (1.8 N/mm ²)	ISO 75-1/-2 DIN 53461 ASTM D 648	°C	105
Thermal conductivity (+23°C)	DIN 52612	W/(m×K)	0.19

combustibility characteristics

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

electrical characteristics

Characteristic	Standard	Unit	Value
Dielectric constant, relative permittivity (1 MHz, dry)	DIN IEC 60250 (DIN VDE 0303-4) ASTM D 150		2.70
Dielectric loss factor (1 MHz, dry)	DIN IEC 60250 (DIN VDE 0303-4) ASTM D 150		0.02
Surface resistivity (dry)	DIN IEC 60093 (DIN VDE 0303-30) ASTM D 257	Ω	10 ¹⁴

physical characteristics

Characteristic	Standard	Unit	Value
Density, Gross density	ISO 1183 DIN 53479 ASTM D 792	g/cm ³	1.19
Water absorption at saturation (water storage 23°C)	ISO 62 DIN 53495 ASTM D 570	%	0.20

chemical characteristics

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