

Material datasheet Material: PAS-ASA

mechanical characteristics

Characteristic	Standard	Unit	Value
Yield stress (+23°C, dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	MPa (N/mm ²)	56
Yield strain (dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	%	3.1
Elongation at break (+23°C, dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	%	8
Tensile E-modulus (+23°C, dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	MPa (N/mm ²)	2600
Max. permissible pressure load (continuous)	Faigle	MPa (N/mm ²)	13
Charpy impact strength (+23°C, dry)	ISO 179 DIN 53453	kJ/m ²	200
Charpy notched impact strength (+23°C, dry)	ISO 179/1eA	kJ/m ²	12

thermal characteristics

Characteristic	Standard	Unit	Value
min. Operating temperature (continuous)		°C	-20
max. service temperature (continuous)		°C	90
max. service temperature (short-term)		°C	100
Coefficient of linear thermal expansion (23 - 60°C)	ISO 11359	10 ⁻⁶ /K	90
Thermal conductivity (+23°C)	DIN 52612	W/(m×K)	0.17

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}

physical characteristics

Characteristic	Standard	Unit	Value
Density, Gross density	ISO 1183 DIN 53479 ASTM D 792	g/cm ³	1.07
Moisture absorption at saturation - standard climate (23°C, 50% RF)	ISO 62 ISO 1110	%	0.35