

Material datasheet

Material: PAS-80 Mo

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
Elongation at break (+23°C, dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	%	160
Tensile E-modulus (+23°C, dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	MPa (N/mm ²)	1800
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
Ball indentation hardness (dry)	ISO 2039-1	MPa (N/mm ²)	100

thermal characteristics

Characteristic	Standard	Unit	Value
min. Operating temperature (continuous)		°C	-30
max. service temperature (continuous)		°C	92
max. service temperature (short-term)		°C	160
Coefficient of linear thermal expansion (23 - 60°C)	ISO 11359	10 ⁻⁶ /K	80
Thermal conductivity (+23°C)	DIN 52612	W/(m×K)	0.26

combustibility characteristics

Characteristic	Standard	Unit	Value
UL94 flammability	IEC 60695-11-10	class	V2

electrical characteristics

Characteristic	Standard	Unit	Value
Dielectric constant, relative permittivity (1 MHz, dry)	DIN IEC 60250 (DIN VDE 0303-4) ASTM D 150		8
Dielectric loss factor (1 MHz, dry)	DIN IEC 60250 (DIN VDE 0303-4) ASTM D 150		0.06

physical characteristics

Characteristic	Standard	Unit	Value
Density, Gross density	ISO 1183 DIN 53479 ASTM D 792	g/cm ³	1.14
Water absorption at saturation (water storage 23°C)	ISO 62 DIN 53495 ASTM D 570	%	8.4