HYG|ie|CLAD
STANDARD

Technical Data

Mechanical properties	Standard	Unit	Value				
			M	D	ES	H	WA
Apparent density*	DIN EN ISO 1183	g/cm³	~ 1.43	~ 1.43	~ 1.43	~ 1.43	~ 1.43
Yield stress (tensile strength)	DIN EN ISO 527	MPa	> 45	≥ 50	≥ 48	≥ 45	≥ 55
Elongation at tear	DIN EN ISO 527	%	> 20	≥ 15	≥ 20	≥ 20	≥ 15
Flexural strength	DIN EN ISO 178	MPa	≥ 80	≥ 75	≥ 75	≥ 70	≥ 80
Compressive strength	DIN EN ISO 844	MPa	≥ 70	≥ 65	≥ 65	≥ 60	≥ 70
Modulus of elasticity	DIN EN ISO 527 2/1A/50	MPa	> 2500	≥ 2500	≥ 2500	≥ 2500	≥ 3000
Notched impact strength	DIN EN ISO 179-1ePA	KJ/m²	≥ 4	≥ 6	≥ 6	≥ 8	≥ 4
Impact strength	DIN EN ISO 179	KJ/m²					
0 °C			no failure	no failure	no failure	no failure	no failure
-20 °C				no failure	no failure	no failure	
-30 °C					no failure	no failure	
-40 °C						no failure	
Ball indentation hardness (358 N/30 s)	DIN EN ISO 2039	MPa	~ 100	~ 90	~ 90	~ 90	~ 100

Thermal properties	Standard	Unit	Value				
			M	D	ES	H	WA
Vicat softening temperature	DIN EN ISO 306 (process B50)	°C	≥ 75	≥ 72	≥ 72	≥ 72	≥ 75
Deflection temperature	DIN EN ISO 75	°C	~ 68	~ 66	~ 66	~ 66	~ 68
Coefficient of linear thermal expansion from – 30 °C to + 50 °C	DIN EN ISO 11359-2 (process Ae)	mm/mK	0.08	0.08	0.08	0.08	0.08
Thermal conductivity from 0 °C to + 60 °C	DIN EN ISO 22007	W/mK	0.16	0.16	0.16	0.16	0.16

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