

Technical Data

Mechanical properties

	Standard	Unit	Value					
			M	D	ES	H	WA	
Apparent density*	DIN EN ISO 1183	g/cm ³	~ 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/m ²	≥ 4	≥ 6	≥ 6	≥ 8	≥ 4	
Impact strength	DIN EN ISO 179	KJ/m ²						
			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

Fire rating

C S3 D0

Technical Data

Mechanical properties

	Standard	Unit	Value					
			M	D	ES	H	WA	
Apparent density*	DIN EN ISO 1183	g/cm ³	~ 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/m ²	≥ 4	≥ 6	≥ 6	≥ 8	≥ 4	
Impact strength	DIN EN ISO 179	KJ/m ²						
			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

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			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

Fire rating

B S3 D0 - CE Approved
C S3 D0

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Mechanical properties	Standard	Unit	Value
Apparent density*	DIN EN ISO 1183	g/cm ³	~ 1,43
Yield stress (tensile strength)	DIN EN ISO 527	MPa	≥ 55
Elongation at tear	DIN EN ISO 527		≥ 15
Flexural strength	DIN EN ISO 178	MPa	≥ 80
Compressive strength	Based on DIN EN ISO 844	MPa	≥ 70
Modulus of elasticity	DIN EN ISO 527-2/1A/50	MPa	≥ 3000
Notched impact strength	DIN EN ISO 179-1ePA	KJ/m ²	≥ 4
Impact strength	DIN EN ISO 179	KJ/m ²	
	0 °C		no failure
	-20 °C		
	-30 °C		
	-40 °C		
Ball indentation hardness (358 N/30 s)	DIN EN ISO 2039	MPa	~ 100

Thermal properties	Standard	Unit	Value
Vicat softening temperature	DIN EN ISO 306 (Process B50)	°C	≥ 75
Deflection temperature	DIN EN ISO 75		~ 68
Coefficient of linear thermal expansion from -30 °C to +50 °C	DIN EN ISO 11359-2 (Process Ae)	mm/mK	0,08
Thermal conductivity from 0 °C to +60 °C	DIN EN ISO 22007	W/mK	0,16

Antimicrobial properties

Bezeichnung	Norm	Einheit	Wert
Staphylococcus Aureus	DIN ISO 22196:2011	%	99,76
Escherichia Coli	DIN ISO 22196:2011	%	99,82