



PA12 1000x500x45 mm natural

Article No.	P1000508
Category	PA

Technical Properties

Density & Weight

Property	Value	Unit	Test standard
Density	1.04	g/cm ³	

Moisture Absorption

Property	Value	Unit	Test standard
Water absorption to saturation	3	%	ISO 62
Water Absorption to Saturation	3	%	ISO 62

Tensile Properties

Property	Value	Unit	Test standard
Tensile Strength	66	MPa	ISO 527
Modulus of elasticity (tensile)	1470	MPa	ISO 527
Breakdown Voltage	45	MPa	ISO 527
Break Elongation	50	%	ISO 527

Flexural Properties

Property	Value	Unit	Test standard
Flexural Strength	53	MPa	DIN EN ISO 527-2

Impact Resistance

Property	Value	Unit	Test standard
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Property	Value	Unit	Test standard
Notched impact strength (Charpy)	7	kJ/m²	DIN EN ISO 179-1

Hardness

Property	Value	Unit	Test standard
Hardness Shore D	83	° Shore D	ISO 868
Ball pressure hardness	90	MPa	ISO 2039

Temperature Limits

Property	Value	Unit	Test standard
Melting point	180	°C	DIN EN ISO 11357
Maximal operating temperature (short-term)	133	°C	UL746B
Maximum Operating Temperature	110	°C	
Heat deflection temperature (HDT/A)	115	°C	ISO 75
Heat deflection temperature (HDT/B)	135	°C	ISO 75
Vicat softening temperature (VST/B/50)	50	°C	ISO 306

Thermal Expansion

Property	Value	Unit	Test standard
Thermal Expansion Coefficient	0.9	10 ⁻⁴ /K	ISO 11359

Insulation Properties

Property	Value	Unit	Test standard
Dielectric Strength	34	kV/mm	IEC 60243-1
Volume Resistivity	10 ¹¹	Ω	IEC 60093
Dielectric Constant (1 MHz)	1	-	IEC 60250
Dielectric loss factor (1 MHz)	1	-	IEC 60250

Static spread

Property	Value	Unit	Test standard
Surface Resistivity	~10 ¹³	Ω	IEC 60093
Comparative Tracking Index (CTI)	600	V	IEC 60112

Fire Classification

Property	Value	Unit	Test standard
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Property	Value	Unit	Test standard
Flammability Classification (UL 94)	60695		UL 94