

WIC PA6 40 N; BK

(Stand: 20.05.2021)

Base Polymer	Polyamide 6
Filler	40% carbon fiber
Colour	natural (carbon optic), black
Special Features	medium viscosity
Typical Applications	Automotive, sports

Pre Drying Conditions	dry-air dryer 80°C for 2-8h, dependant on moisture content max. moisture content <0,12%
Processing Conditions	injection moulding melt temperature 250-270°C injection moulding mould temperature 60-100°C Under certain circumstances, the thermal conductivity has to be considered.
Storage	dry, protected from light

Properties	Value (dry)	Value (conditioned)	Dimension	Test Norm
Mechanical Properties				
Tensile modulus	29000	14200	MPa	ISO 527-1/-2
Tensile strength	210	125	MPa	ISO 527-1/-2
Tensile elongation at break	1,0	2,3	%	ISO 527-1/-2
Flexural modulus	24500	-	MPa	ISO 178
Flexural strength	330	-	MPa	ISO 178
Charpy impact strength unnotched 23°C	50	55	kJ/m ²	ISO 179/1eU
Charpy impact strength unnotched -40°C	-	-	kJ/m ²	ISO 179/1eU
Charpy impact strength notched 23°C	9	12	kJ/m ²	ISO 179/1eA
Charpy impact strength notched -40°C	-	-	kJ/m ²	ISO 179/1eA
Thermal Properties				
Vicat B50	-	-	°C	ISO 306
HDT/A (1,8 MPa)	218	-	°C	ISO 75
Melt Point (DSC)	220	-	°C	ISO 11357
Electrical Properties				
Surface resistance max.	10	-	Ohm	IEC 62631-3-2
Volume resistance	10	-	Ohm*m	IEC 62631-3-1
Rheological Properties				
MVR	20	-	cm ³ /10min	ISO 1133
MVR temperature	275	-	°C	-
MVR load	5	-	kg	-
Shrinkage - lengthwise	0,1	-	%	ISO 294-4
Shrinkage - lateral	0,4	-	%	ISO 294-4
Physical Properties				

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Density	1340	-	kg/m ³	ISO 1183
CO ₂ -Bilanz (GWP100)	4,79		[kg CO ₂ eq.]	GaBi (DIN EN ISO 14040/14044)

These are guide values and not a specification. The test values mentioned are representative values only and not binding minimum or maximum figures. These test values have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions.

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