WIC PA6 12 GF18 N; BK

(Stand: 20.05.2021)

Base Polymer	Polyamide 6
Filler	12% carbon fiber + 18% glass fiber
Colour	natural (carbon optic), black
Special Features	medium viscosity, heat stabilized, electrical conductive
Typical Applications	Automotive, industries

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 by ISO 1110)**	**Dimension**	**Test Norm**
Mechanical Properties				
Tensile modulus	15000	8000	MPa	ISO 527-1/-2
Tensile strength	160	95	MPa	ISO 527-1/-2
Tensile elongation at break	1,5	4	%	ISO 527-1/-2
Flexural modulus	14000	7300	MPa	ISO 178
Flexural strength	240	145	MPa	ISO 178
Charpy impact strength unnotched 23°C	45	54	kJ/m²	ISO 179/1eU
Charpy impact strength unnotched -40°C	-	-	kJ/m²	ISO 179/1eU
Charpy impact strength notched 23°C	7	12	kJ/m²	ISO 179/1eA
Charpy impact strength notched -40°C	-	-	kJ/m²	ISO 179/1eA
Thermal Properties				
HDT-A (1,8 MPa)	209	-	°C	ISO 75
HDT-B (0,45 MPa)	221	-	°C	ISO 75
Melt Point (DSC)	220	-	°C	ISO 11357
Electrical Properties				
Surface resistance max.	10E2	-	Ohm	IEC 62631-3-2
Volume resistance	10E2	-	Ohm*m	IEC 62631-3-1
Other Properties				
Water absorption	4,7	-	%	ISO 62
Humidity absorption	0,5	-	%	ISO 62

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Rheological Properties				
MVR	50	-	cm³/10min	ISO 1133
MVR temperature	275	-	°C	-
MVR load	5	-	kg	-
Shrinkage - lengthwise	0,2	-	%	ISO 294-4
Shrinkage - lateral	0,5	-	%	ISO 294-4
Physical Properties				
Density	1350	-	kg/m³	ISO 1183
CO_2-Footprint (GWP100)	**5,57**		**[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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