



<b>Badalon® PC 20 GF30</b>				
PC-GF30				
With 30% glass fibres reinforced standard injection moulding grade				
Properties	Test Conditions	Test Methods	Units	Typical Value
<b>Mechanical Properties</b>				
Modulus, tensile	-	ASTM D 638	MPa	8 300
Tensile Yield Strength	-	ASTM D 638	MPa	-
Elongation at Yield	-	ASTM D 638	%	-
Elongation at Break	-	ASTM D 638	%	-
Stress at Break <sup>1</sup>	-	ASTM D 638	MPa	130
Strain at Break <sup>1</sup>	-	ASTM D 638	%	2,5
Bending Strength <sup>2</sup>	23° C	ISO 178	MPa	-
Charpy Impact Strength, unnotched <sup>2</sup>	23° C	ISO 179/1eU	kJ/m2	55
	-30° C	ISO 179/1eU	kJ/m2	-
Notched Charpy Impact Strength <sup>2</sup>	23° C	ISO 179/1eA	kJ/m2	12
	-30° C	ISO 179/1eA	kJ/m2	-
Izod notched Impact Strength <sup>2</sup>	23° C	ISO 180/1A	kJ/m2	-
	-30° C	ISO 180/1A	kJ/m2	-
<b>Thermische Eigenschaften</b>				
melting temperature		ISO 3146	°C	-
Temperature of Deflection under Load <sup>4</sup>	0,45 MPa	ISO 75-1/2	°C	145
	1,8 MPa	ISO 75-1/2	°C	139
Coefficient of Linear Thermal Elongation <sup>5</sup>	parallel direction	DIN 53752	E-4/K	-
	transverse direction	DIN 53752	E-4/K	-
Maximum Service Temperature	some hours	-	°C	-
	20 000 h 50 % Decrease in Tensile Strength or Yield Stress	IEC 216	°C	-
Flammability <sup>6</sup>	0,8 mm	UL 94	Class	HB
	1,6 mm	UL 94	Class	HB
Glow Wire Test	2 mm	GWIT	IEC-60695-2-13	-
	2 mm	GWFI	IEC-60695-2-12	-
<b>Electric Properties</b>				
Relative Permittivity <sup>7</sup>	1 MHz	IEC 250	-	-
Dissipation Factor <sup>7</sup>	1 MHz	IEC 250	E-4	-
Specific Volume Resistivity <sup>7</sup>	-	IEC 93	Ohm cm	-
Specific Surface Resistivity <sup>7</sup>	-	IEC 93	Ohm	-
Dielectric Strength <sup>7</sup>	-	IEC 243-1	kV/mm	-
Comparative Tracking Index	-	IEC 112	V	175
<b>Other data</b>				
Water Absorption	23° C, Saturation	ISO 62	%	-
Moisture Absorption	23° C, 50 % r.H.	ISO 62	%	0,25
Melt Flow Rate	300°C, 1,2kg	ASTM D 1238	g/10min	-
Density	23° C	ISO 1183	g/cm <sup>3</sup>	1,41
<b>Processing</b>				
Melt Temperature	-	-	°C	270 – 310
Tool Surface Temperature	-	-	°C	70 – 90
Drying Temperature	-	-	°C	100
Drying Time	-	-	h	3 – 4

**LEGEND:**

- <sup>1</sup> Test Specimen according to ISO 3167, Type A
- <sup>2</sup> Standard bar (80 x 10 x 4) mm
- <sup>3</sup> Compound for moulding
- <sup>4</sup> Standard bar (110 x 10 x 4) mm
- <sup>5</sup> Specimen (≥ 10 x 10 x 4) mm

- <sup>6</sup> Standard bar [125 x 13 x 0,8(1,6)] mm
- <sup>7</sup> Bar (80 x 80 x 1) mm
- <sup>8</sup> Specimen (≥ 15 x 15 x 4) mm

\* not relevant  
- not tested  
NB = No break

These data are typical values and represent the state of our knowledge at issue date. If not otherwise stated, the data is related to uncoloured material. They must not be construed as specification limits or as a guarantee for specific properties. It is the liability of the processor to test the suitability of the material for a specific application.  
**Issue date: 2014-08-21**