

# Datasheet

## Pocan C5210 000000

PC+PET, 15% mineral, injection molding, improved impact strength, low tendency to warp, improved surface finish

ISO Shortname: ISO 20028-PC+PET,MD15,GHMPR,09-030

Property	Test Condition	Unit	Standard	guide value <sup>1</sup>
<b>Rheological properties</b>				
C Melt volume-flow rate	270 °C; 5 kg	cm <sup>3</sup> /(10 min)	ISO 1133-1	20
C Molding shrinkage, parallel	60x60x2; 270 °C / WZ 80 °C; 600 bar	%	ISO 294-4	0.6
C Molding shrinkage, transverse	60x60x2; 270 °C / WZ 80 °C; 600 bar	%	ISO 294-4	0.6
Post- shrinkage, parallel	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.3
Post- shrinkage, transverse	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.3
<b>Mechanical properties (23 °C/50 % r. h.)</b>				
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	3500
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	45
C Tensile Strain at break	5 mm/min	%	ISO 527-1,-2	15
C Charpy impact strength	23 °C	kJ/m <sup>2</sup>	ISO 179-1eU	N
C Charpy impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 179-1eU	N
C Charpy notched impact strength	23 °C	kJ/m <sup>2</sup>	ISO 179-1eA	12
C Charpy notched impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 179-1eA	7
Izod impact strength	23 °C	kJ/m <sup>2</sup>	ISO 180-1U	N
Izod impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 180-1U	N
Izod notched impact strength	23 °C	kJ/m <sup>2</sup>	ISO 180-1A	12
Izod notched impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 180-1A	7
Flexural modulus	2 mm/min	MPa	ISO 178-A	3800
Flexural strength	2 mm/min	MPa	ISO 178-A	85
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	5.0
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178-A	80
Energy to peak force	23 °C	Nm	acc. ISO 6603-2	4400
Ball indentation hardness		N/mm <sup>2</sup>	ISO 2039-1	100
<b>Thermal properties</b>				
C Melting temperature	10 °C/min	°C	ISO 11357-1,-3	250
C Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	105
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	125
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10 <sup>-4</sup> /K	ISO 11359-1,-2	0.5
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10 <sup>-4</sup> /K	ISO 11359-1,-2	0.8
C Burning behavior UL 94	1.5 mm	Class	UL 94	HB
C Burning behavior UL 94	0.75 mm	Class	UL 94	HB
C Vicat softening temperature	50 N; 50 °C/h	°C	ISO 306	135

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Property	Test Condition	Unit	Standard	guide value <sup>1</sup>
<b>Electrical properties (23 °C/50 % r. h.)</b>				
C Comparative tracking index CTI	Solution A	Rating	IEC 60112	225
<b>Other properties (23 °C)</b>				
C Density		kg/m <sup>3</sup>	ISO 1183	1300
Bulk density		kg/m <sup>3</sup>	ISO 60	850
<b>Processing conditions for test specimens</b>				
C Injection molding-Melt temperature		°C	ISO 294	270
C Injection molding-Mold temperature		°C	ISO 294	80
<b>Processing recommendations</b>				
Drying temperature circulating air dryer		°C	-	120
Drying time circulating air dryer		h	-	4-8
Residual moisture content		%	Acc. to Karl Fischer	0.00-0.02
Melt temperature (Tmin - Tmax)		°C	-	260-280
admissible residence time at Tmax		min	-	<10
Mold temperature		°C	-	70-90

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications

**C** These property characteristics are taken from the CAMPUS plastics data bank and are based on the international catalogue of basic data for plastics according to ISO 10350.

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Property data is provided as general information only. Property values are approximate and are not part of the product specifications.

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