

**Product Texts**

50% Glass Reinforced, PA4T, Heat Stabilized, for Structural Parts

ISO 1043 PPA-GF50

ForTii® Ace MX53B is a high Tg PPA combining good toughness at low temperatures and chemical resistance. It is designed to replace metal in structural parts that need high performance over a broad temperature range, from -35°C to above 150°C, both in dry as well as conditioned environment.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	0.8 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	18000 / 18900	MPa	ISO 527
<sup>[C]</sup> Stress at break	260 / 240	MPa	ISO 527
<sup>[C]</sup> Strain at break	2.1 / 2	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	80 / 70	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	75 / 65	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	11 / 9.5	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	11 / 9.5	kJ/m <sup>2</sup>	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	330 / *	°C	ISO 11357-1/-3
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	305 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	320 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	14 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	47 / *	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Comparative tracking index	400 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
<sup>[C]</sup> Water absorption	3.3 / *	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	1.5 / *	%	Sim. to ISO 62
<sup>[C]</sup> Density	1660 / -	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

**Characteristics****Processing**

Injection Molding

**Chemical Resistance**

General Chemical Resistance

**Delivery form**

Pellets

**Regional Availability**

Europe, Asia Pacific

**Special Characteristics**

Heat stabilized or stable to heat

**Other text information**

**Injection molding**

[Injection Molding Recommendations](#)