

Product Texts

40% Glass Reinforced, PA4T, Heat Stabilized, for Automotive applications

ISO 1043 PPA-GF40

ForTii® MX2 is a high Tg PPA that outperforms in dimensional stability at elevated temperatures due to the high heat deflection temperature (HDT). MX2 has excellent fatigue performance and good chemical resistance.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.0 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	14500 / 14800	MPa	ISO 527
^[C] Stress at break	230 / 210	MPa	ISO 527
^[C] Strain at break	2.3 / 2.2	%	ISO 527
^[C] Charpy impact strength, +23°C	70 / 60	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	65 / 55	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	11 / 9	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	10 / 8	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	325 / *	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	125 / *	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	305 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	317 / *	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	17 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	55 / *	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	4.9 / 5.7	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	4.6 / 4.8	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	57 / 270	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	180 / 290	E-4	IEC 62631-2-1
^[C] Volume resistivity	>1E13 / >1E13	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	* / >1E15	Ohm	IEC 62631-3-2

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	4.7 / *	%	Sim. to ISO 62
^[C] Humidity absorption	1.8 / *	%	Sim. to ISO 62
^[C] Density	1550 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

ForTii® MX2

PPA-GF40

Envalior

Processing

Injection Molding

Chemical Resistance

General Chemical Resistance

Delivery form

Pellets

Applications

Automotive

Special Characteristics

Heat stabilized or stable to heat

Regional Availability

North America, Europe, Asia Pacific

Features

Fatigue Resistance

Other text information**Injection molding**[Injection Molding Recommendations](#)[Hot runner recommendations for molding high heat performance Engineering Materials](#)[Steel recommendations for molds screws and barrels](#)[Trouble shooting guideline for injection molding](#)