


**ForTii® Ace MX51**

PPA-GF30

Envalior

**Product Texts**

30% Glass Reinforced, PA4T, Heat Stabilized, for Automotive applications

ISO 1043 PPA-GF30

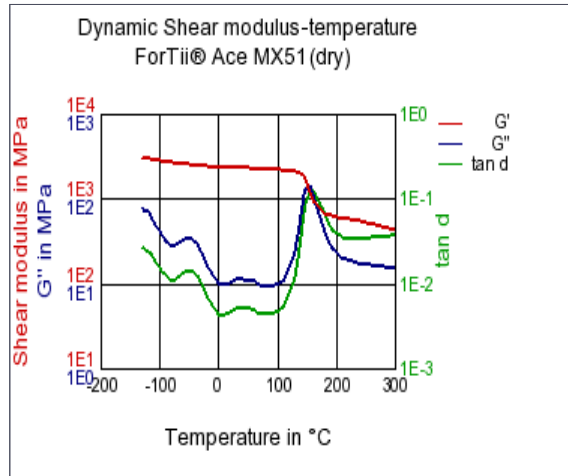
**ForTii®**

Ace MX51 is a PPA with unique fatigue performance and chemical resistance. The high aromatic content and high Tg lead to excellent part stiffness and low creep, even up to 150°C. Moisture uptake occurs slowly with very limited impact on dimensions.

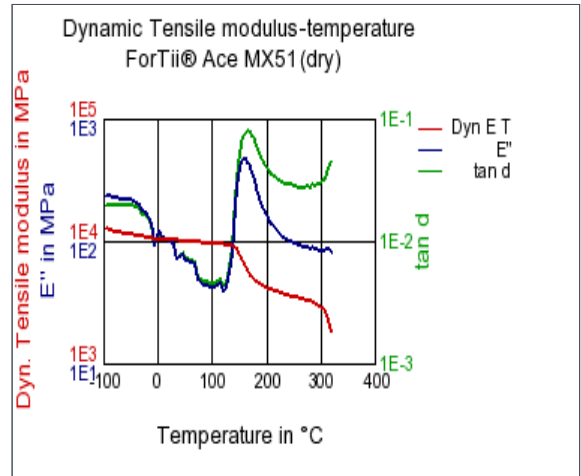
<b>Rheological properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Molding shrinkage, parallel	0.4 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	1.1 / *	%	ISO 294-4, 2577
<b>Mechanical properties</b>			
<b>ISO Data</b>			
Tensile Modulus	11300 / 11800	MPa	ISO 527
Stress at break	190 / 180	MPa	ISO 527
Strain at break	2.1 / 2	%	ISO 527
Charpy impact strength, +23°C	45 / 40	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	40 / 35	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	9.5 / 9	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	9 / 8	kJ/m <sup>2</sup>	ISO 179/1eA
<b>Thermal properties</b>			
<b>ISO Data</b>			
Melting temperature, 10°C/min	335 / *	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	317 / *	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	330 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	18 / *	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	58 / *	E-6/K	ISO 11359-1/-2
<b>Other properties</b>			
<b>ISO Data</b>			
Water absorption	4.7 / *	%	Sim. to ISO 62
Humidity absorption	2 / *	%	Sim. to ISO 62
Density	1450 / -	kg/m <sup>3</sup>	ISO 1183

Diagrams

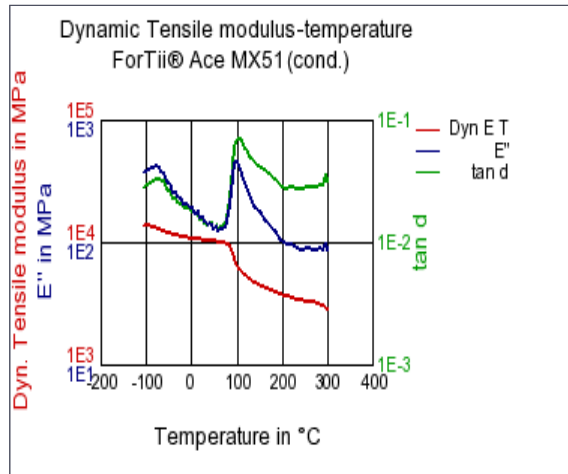
Dynamic Shear modulus-temperature



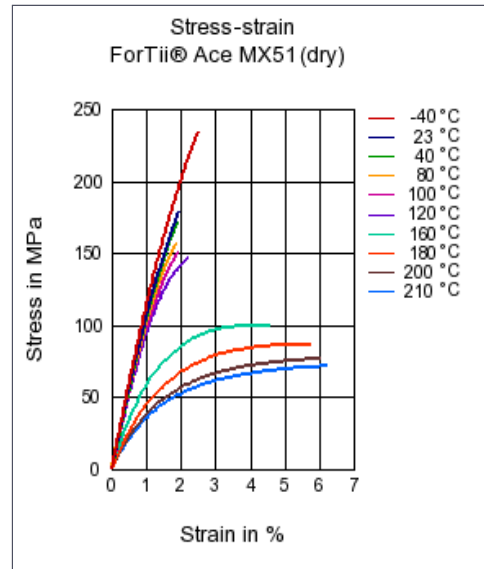
Dynamic Tensile modulus-temperature



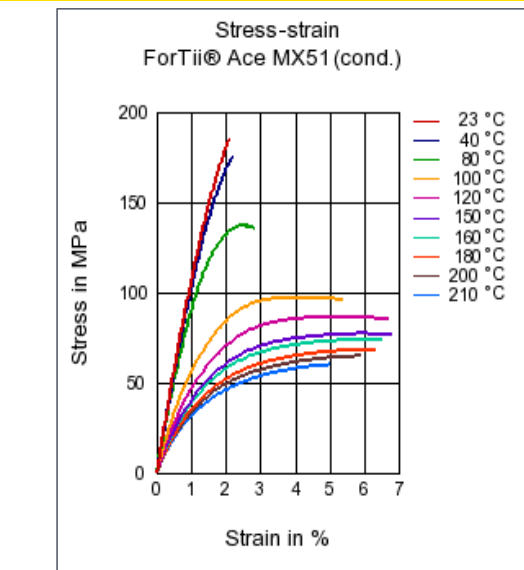
Dynamic Tensile modulus-temperature



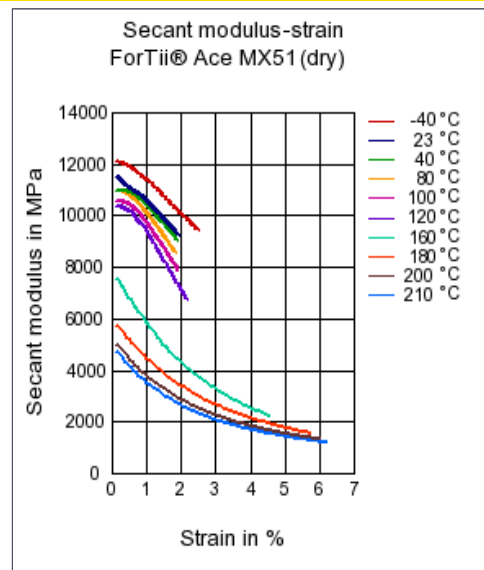
Stress-strain



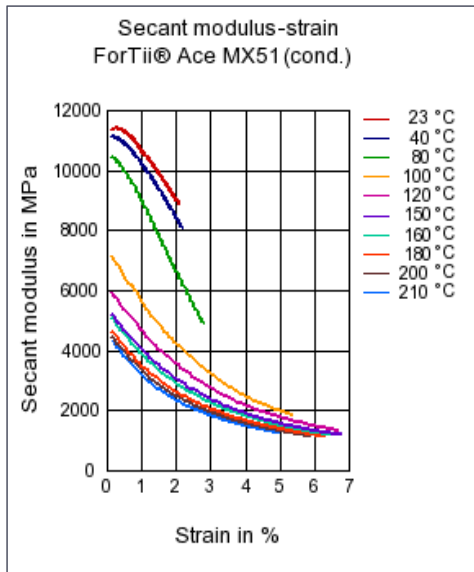
Stress-strain



Secant modulus-strain



**Secant modulus-strain**



**Characteristics**

**Processing**

Injection Molding

**Special Characteristics**

Heat stabilized or stable to heat

**Delivery form**

Pellets

**Applications**

Automotive

**Other text information**

**Injection Molding**

[Injection Molding Recommendations](#)

**Chemical Media Resistance**

**Alcohols**

😊 Ethanol (23 °C)

**Hydrocarbons**

😊 Toluene (23 °C)

**Ketones**

😊 Acetone (23 °C)

**Ethers**

😊 Diethyl ether (23 °C)

**Other**

😊 Ethyl Acetate (23 °C)

😊 Water (23 °C)