

EcoPaXX® Q-HG10

PA410-GF50

50% Glass Reinforced, Heat Stabilized

EcoPaXX® Q-HG10 is a long aliphatic polyamide with excellent chemical & hydrolysis resistance for use in thermal management applications as well as other structural parts.

Sustainability

Bio-based – 14C measurable

Properties	Typical Data	Unit	Test Method
Rheological properties	dry / cond		
Molding shrinkage (parallel)	0.4 / *	%	ISO 294-4
Molding shrinkage (normal)	0.8 / *	%	ISO 294-4
Mechanical properties	dry / cond		
Tensile modulus	16000 / 12000	MPa	ISO 527-1/-2
Stress at break	220 / 170	MPa	ISO 527-1/-2
Strain at break	3 / 3.5	%	ISO 527-1/-2
Tensile modulus (120°C)	7600 / -	MPa	ISO 527-1/-2
Stress at break (120°C)	115 / -	MPa	ISO 527-1/-2
Strain at break (120°C)	6.4 / -	%	ISO 527-1/-2
Tensile modulus (160°C)	5900	MPa	ISO 527-1/-2
Stress at break (160°C)	95	MPa	ISO 527-1/-2
Strain at break (160°C)	7.7	%	ISO 527-1/-2
Charpy impact strength (+23°C)	80 / 85	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	80 / 90	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	15 / 19	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	12 / 14	kJ/m ²	ISO 179/1eA
Flexural modulus	14600 / 11300	MPa	ISO 178



Property Data

EcoPaXX[®] Q-HG10

Properties	Typical Data	Unit	Test Method
Flexural strength	335 / 250	MPa	ISO 178
Thermal properties		dry / cond	
Melting temperature (10°C/min)	250 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	215 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	245 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.42 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.5 / *	E-4/°C	ISO 11359-1/-2
Other properties		dry / cond	
Humidity absorption	1.1 / *	%	Sim. to ISO 62
Density	1520 / -	kg/m ³	ISO 1183
Biobased content (in polymer)	70	% (Bio C/Total C)	ASTM D6866-12 Method B

