

EcoPaXX® Q-DWX10

PA410-GF50

50% Glass Reinforced, Excellent Surface Properties, Drinking Water Grade, Food Contact Quality

EcoPaXX® Q-DWX10 is a long aliphatic polyamide with excellent mechanical & flow performance for use in food contact & drinking water applications

Sustainability

Bio-based - 14C measurable

Properties	Typical Data	Unit	Test Method
Rheological properties	dry / cond		
Molding shrinkage (parallel)	0.15 / *	%	ISO 294-4
Molding shrinkage (normal)	0.5 / *	%	ISO 294-4
Mechanical properties	dry / cond		
Tensile modulus	16500 / 16000	MPa	ISO 527-1/-2
Stress at break	240 / 210	MPa	ISO 527-1/-2
Strain at break	3 / 3.3	%	ISO 527-1/-2
Tensile modulus (80°C)	12000 / -	MPa	ISO 527-1/-2
Stress at break (80°C)	140 / -	MPa	ISO 527-1/-2
Strain at break (80°C)	5.5 / -	%	ISO 527-1/-2
Tensile modulus (120°C)	4900 / -	MPa	ISO 527-1/-2
Stress at break (120°C)	75 / -	MPa	ISO 527-1/-2
Strain at break (120°C)	12 / -	%	ISO 527-1/-2
Tensile modulus (140°C)	4500	MPa	ISO 527-1/-2
Stress at break (140°C)	60	MPa	ISO 527-1/-2
Strain at break (140°C)	11	%	ISO 527-1/-2
Tensile modulus (160°C)	4000	MPa	ISO 527-1/-2



Property Data

EcoPaXX[®] Q-DWX10

Properties	Typical Data	Unit	Test Method
Stress at break (160°C)	50	MPa	ISO 527-1/-2
Strain at break (160°C)	10	%	ISO 527-1/-2
Charpy impact strength (+23°C)	100 / 80	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	90 / 75	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	16 / 13	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	14 / 13	kJ/m ²	ISO 179/1eA
Flexural modulus	15500 / 15000	MPa	ISO 178
Flexural strength	380 / 330	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)	200 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	235 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.2 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	1 / *	E-4/°C	ISO 11359-1/-2
Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10
Burning Behav. at 3.0 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	3 / *	mm	IEC 60695-11-10

Electrical properties

dry / cond

Electric strength	27 / -	kV/mm	IEC 60243-1
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Other properties

dry / cond

Water absorption	3 / *	%	Sim. to ISO 62
Humidity absorption	1.2 / *	%	Sim. to ISO 62
Density	1570 / -	kg/m ³	ISO 1183

