Property Data

Envalior
Imagine the Future

EcoPaXX® Q–DWX12

PA410–GF60

60% Glass Reinforced, Excellent Surface Properties, Drinking Water Grade, Food Contact Quality

Certified to NSF/ANSI 61

Sustainability

Bio–based

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	DRY / COND		
Molding shrinkage (parallel)	0.28 / *	%	ISO 294–4
Molding shrinkage (normal)	0.64 / *	%	ISO 294–4
MECHANICAL PROPERTIES	DRY / COND		
Tensile modulus	21600 / 21200	MPa	ISO 527–1/–2
Stress at break	260 / 220	MPa	ISO 527–1/–2
Strain at break	2.4 / 2.4	%	ISO 527–1/–2
Tensile modulus (80°C)	15400 / –	MPa	ISO 527–1/–2
Stress at break (80°C)	155 / –	MPa	ISO 527–1/–2
Strain at break (80°C)	4.1 / –	%	ISO 527–1/–2
Tensile modulus (120°C)	5300 / –	MPa	ISO 527–1/–2
Stress at break (120°C)	71 / –	MPa	ISO 527–1/–2
Strain at break (120°C)	9 / –	%	ISO 527–1/–2
Tensile modulus (140°C)	4500	MPa	ISO 527–1/–2
Stress at break (140°C)	56	MPa	ISO 527–1/–2
Strain at break (140°C)	8.5	%	ISO 527–1/–2

Property Data

EcoPaXX® Q–DWX12

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Tensile modulus (160°C)	3800	MPa	ISO 527–1/–2
Stress at break (160°C)	47	MPa	ISO 527–1/–2
Strain at break (160°C)	8	%	ISO 527–1/–2
Charpy impact strength (+23°C)	98 / 85	kJ/m²	ISO 179/1eU
Charpy impact strength (–30°C)	100 / 87	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	15 / 15	kJ/m²	ISO 179/1eA
Charpy notched impact strength (–30°C)	18 / 17	kJ/m²	ISO 179/1eA
Flexural modulus	20200 / 20200	MPa	ISO 178
Flexural strength	415 / 365	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)	0.12 / *	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	0.48 / *	E–4/°C	ISO 11359–1/–2

OTHER PROPERTIES	DRY / COND		
Water absorption	2.7 / *	%	Sim. to ISO 62
Humidity absorption	1.1 / *	%	Sim. to ISO 62
Density	1710 / –	kg/m³	ISO 1183