Property Data

Envalior
Imagine the Future

EcoPaXX® Q–DWX6

PA410–GF30

30% Glass Fiber Reinforced, Excellent Surface Properties, Drinking Water Grade, Food Contact Quality

Print Date: 2025–10–04

EcoPaXX® Q–DWX6 is a long aliphatic polyamide with excellent mechanical & flow performance for use in food contact & drinking water applications

Sustainability

Bio–based

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	DRY / COND		
Molding shrinkage (parallel)	0.17 / *	%	ISO 294–4
Molding shrinkage (normal)	0.74 / *	%	ISO 294–4
MECHANICAL PROPERTIES	DRY / COND		
Tensile modulus	9500 / 9300	MPa	ISO 527–1/–2
Stress at break	190 / 170	MPa	ISO 527–1/–2
Strain at break	3.3 / 3.5	%	ISO 527–1/–2
Tensile modulus (80°C)	6900 / –	MPa	ISO 527–1/–2
Stress at break (80°C)	110 / –	MPa	ISO 527–1/–2
Strain at break (80°C)	8 / –	%	ISO 527–1/–2
Tensile modulus (120°C)	2800 / –	MPa	ISO 527–1/–2
Stress at break (120°C)	65 / –	MPa	ISO 527–1/–2
Strain at break (120°C)	15 / –	%	ISO 527–1/–2
Tensile modulus (140°C)	2500	MPa	ISO 527–1/–2
Stress at break (140°C)	55	MPa	ISO 527–1/–2
Strain at break (140°C)	14	%	ISO 527–1/–2
Tensile modulus (160°C)	2200	MPa	ISO 527–1/–2
Stress at break (160°C)	45	MPa	ISO 527–1/–2

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Strain at break (160°C)	13	%	ISO 527–1/–2
Charpy impact strength (+23°C)	65 / 50	kJ/m²	ISO 179/1eU
Charpy impact strength (–30°C)	60 / 50	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	11 / 8	kJ/m²	ISO 179/1eA
Charpy notched impact strength (–30°C)	8.5 / 7.5	kJ/m²	ISO 179/1eA
Flexural modulus	9100 / 9000	MPa	ISO 178
Flexural strength	285 / 255	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)	190 / *	°C	ISO 75–1/–2
Temp. of deflection under load (0.45 MPa)	230 / *	°C	ISO 75–1/–2
Coeff. of linear therm. expansion (parallel)	0.22 / *	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	0.66 / *	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

OTHER PROPERTIES	DRY / COND		
Water absorption	4 / *	%	Sim. to ISO 62
Humidity absorption	1.5 / *	%	Sim. to ISO 62
Density	1360 / –	kg/m³	ISO 1183