Property Data

Envalior
Imagine the Future

EcoPaXX® Q–HG6

PA410–GF30

30% Glass Fiber Reinforced, Heat Stabilized

Print Date: 2025–11–22

EcoPaXX® Q–HG6 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

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	DRY / COND		
Molding shrinkage (parallel)	0.5 / *	%	ISO 294–4
Molding shrinkage (normal)	1 / *	%	ISO 294–4
MECHANICAL PROPERTIES	DRY / COND		
Tensile modulus	9200 / 7000	MPa	ISO 527–1/–2
Stress at break	180 / 120	MPa	ISO 527–1/–2
Strain at break	3.9 / 5.8	%	ISO 527–1/–2
Tensile modulus (80°C)	5700 / –	MPa	ISO 527–1/–2
Stress at break (80°C)	115 / –	MPa	ISO 527–1/–2
Strain at break (80°C)	8.5 / –	%	ISO 527–1/–2
Tensile modulus (120°C)	4600 / –	MPa	ISO 527–1/–2
Stress at break (120°C)	85 / –	MPa	ISO 527–1/–2
Strain at break (120°C)	9 / –	%	ISO 527–1/–2
Tensile modulus (160°C)	3700	MPa	ISO 527–1/–2
Stress at break (160°C)	70	MPa	ISO 527–1/–2
Strain at break (160°C)	9.5	%	ISO 527–1/–2
Charpy impact strength (+23°C)	80 / 80	kJ/m²	ISO 179/1eU
Charpy impact strength (–30°C)	60 / 60	kJ/m²	ISO 179/1eU

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Charpy notched impact strength (+23°C)	11 / 15	kJ/m²	ISO 179/1eA
Charpy notched impact strength (–30°C)	9 / 9	kJ/m²	ISO 179/1eA
Flexural modulus	8500 / 6300	MPa	ISO 178
Flexural strength	260 / 185	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)	243 / *	°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)	0.81 / *	E–4/°C	ISO 11359–1/–2
ELECTRICAL PROPERTIES	**DRY / COND**		
Volume resistivity	1E12 / 1E11	Ohm*m	IEC 62631–3–1
Surface resistivity	– / 1E13	Ohm	IEC 62631–3–2
OTHER PROPERTIES	**DRY / COND**		
Humidity absorption	1.5 / *	%	Sim. to ISO 62
Density	1340 / –	kg/m³	ISO 1183