

EcoPaXX® Q170E-H

PA410

Medium Viscosity, Extrusion, Heat Stabilized, Food Contact Quality

EcoPaXX® Q170E-H is an unfilled long aliphatic polyamide with good thermal properties for use in film & monofilament extrusion

Sustainability

Bio-based – 14C measurable

Also available as bio-based mass balanced alternative

Properties	Typical Data	Unit	Test Method
Mechanical properties			
	dry / cond		
Tensile modulus	3200 / 1600	MPa	ISO 527-1/-2
Stress at break	55 / 45	MPa	ISO 527-1/-2
Strain at break	20 / >50	%	ISO 527-1/-2
Yield stress	85 / 55	MPa	ISO 527-1/-2
Yield strain	4.6 / 20	%	ISO 527-1/-2
Tensile modulus (120°C)	600 / -	MPa	ISO 527-1/-2
Stress at break (120°C)	38 / -	MPa	ISO 527-1/-2
Strain at break (120°C)	200 / -	%	ISO 527-1/-2
Tensile modulus (140°C)	520	MPa	ISO 527-1/-2
Stress at break (140°C)	32	MPa	ISO 527-1/-2
Strain at break (140°C)	200	%	ISO 527-1/-2
Charpy impact strength (+23°C)	N / N	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	N / N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	5.5 / 12	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	4 / 4.5	kJ/m ²	ISO 179/1eA
Thermal properties			
	dry / cond		
Melting temperature (10°C/min)	250 / *	°C	ISO 11357-1/-3



EcoPaXX[®] Q170E-H

Properties	Typical Data	Unit	Test Method
Temp. of deflection under load (1.80 MPa)	75 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	175 / *	°C	ISO 75-1/-2

Other properties

dry / cond

Water absorption	5.8 / *	%	Sim. to ISO 62
Humidity absorption	1.9 / *	%	Sim. to ISO 62
Density	1090 / -	kg/m ³	ISO 1183
Biobased content (in polymer)	70	% (Bio C/Total C)	ASTM D6866-12 Method B

Material specific properties

dry / cond

Viscosity number	170 / *	cm ³ /g	ISO 307, 1157, 1628
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Viscosity-shear rate

