

Trifilon Revo[®] 1042

Art nr: Revo1042-10459-1

Natural Fibers Reinforced Polypropylene

Product Description

Trifilon Revo1042 is a natural fibers reinforced biocomposite engineered for injection moulding using recycled polypropylene from post-industrial processes. This biocomposite is a sustainable replacement for conventional polypropylene compounds.

Status:	Commercially available
Typical Applications:	Consumer Products, Home appliances, Office Supplies
Processing Method:	Injection Molding
Attributes:	Good Stiffness, Strength, Recycled, Biocomposite, Natural fibers
Colour:	Natural light beige, non-visible natural fibers
Compliant:	REACH and RoHS

Physical properties	Values	Units	Method
Density	1.02	g/cm ³	ISO 1183
Melt flow index, MFI (230°C/2.16 kg)	9	g/10min	ISO 1133
Molding Shrinkage, with flow	1.5	%	ISO 294-4
Molding Shrinkage, across flow	1.6	%	ISO 294-4

Mechanical properties	Values	Units	Method
Tensile Modulus	2680	MPa	ISO 527-2
Tensile Stress at Yield	33.5	MPa	ISO 527-2
Tensile Strain at Yield	4.84	%	ISO 527-2
Tensile Stress at Break	33	MPa	ISO 527-2
Tensile Strain at Break	12	%	ISO 527-2
Charpy Impact Strength Notched (20°C)	6.72	kJ/m ²	ISO 179/1eU*
Charpy Impact Strength Unnotched (20°C)	31.48	kJ/m ²	ISO 179/1eU*
Charpy Impact Strength Unnotched (-20°C)	6.72	kJ/m ²	ISO 179/1eU*

Thermal properties	Values	Units	Method
Heat Deflection Temperature (1,8 MPa)	74	°C	ISO 75-2/A
Heat Deflection Temperature (0,45 MPa)	133	°C	ISO 75-2/B

Note: spiral mould Trifilon internal test shows only 5.7% lower flowability of material at 205°C/2000 bar compared to standard PP material with MFI of 15 g/10 min (230°C/2.16 kg)

*Modified procedure according to ISO 179/1eU

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