

# Trifilon Revo<sup>®</sup> 1041

Art nr: Revo1041-10510-1

Natural Fibers Reinforced Polypropylene

## Product Description

Trifilon Revo1041 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.

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

Physical properties	Values	Units	Method
Density	1.02	g/cm <sup>3</sup>	ISO 1183
Melt flow index, MFI (230°C/2.16 kg)	9	g/10min	ISO 1133
Molding Shrinkage, with flow	1.4	%	ISO 294-4
Molding Shrinkage, across flow	1.6	%	ISO 294-4

Mechanical properties	Values	Units	Method
Tensile Modulus	2720	MPa	ISO 527-2
Tensile Stress at Yield	33.23	MPa	ISO 527-2
Tensile Strain at Yield	4.57	%	ISO 527-2
Tensile Stress at Break	32	MPa	ISO 527-2
Tensile Strain at Break	5.6	%	ISO 527-2
Charpy Impact Strength Notched (20°C)	7.42	kJ/m <sup>2</sup>	ISO 179/1eU*
Charpy Impact Strength Unnotched (20°C)	23.39	kJ/m <sup>2</sup>	ISO 179/1eU*
Charpy Impact Strength Unnotched (-20°C)	15.0	kJ/m <sup>2</sup>	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 4% 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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