

Trifilon Switch® 2099

Art nr: Switch2099-10565-1

Natural Fibers Reinforced Biobased Polyester

Product Description

Trifilon Switch2099 is a natural fiber reinforced biodegradable aliphatic polyester (PLA), designed for injection moulding. This biocomposite has up to 90% renewable content and is a sustainable replacement for variety of conventional plastic applications.

Status:	Commercially available
Typical Applications:	Consumer products
Processing Method:	Injection Molding
Attributes:	High Stiffness and strength
Colour:	Natural light beige, visible natural fibers
Compliant:	REACH and RoHS

Physical properties	Values	Units	Method
Density	1.43	g/cm ³	ISO 1183
Melt flow index, MFI (210°C/2.16 kg)	15	g/10min	ISO 1133
Molding Shrinkage, with flow	0.36	%	ISO294-4
Molding Shrinkage, across flow	0.38	%	ISO294-4

Mechanical properties	Values	Units	Method
Tensile Modulus	3400	MPa	ISO 527-2
Tensile Stress at Yield	33.13	MPa	ISO 527-2
Tensile Strain at Yield	1.58	%	ISO 527-2
Tensile Stress at Break	32	MPa	ISO 527-2
Tensile Strain at Break	2	%	ISO 527-2
Charpy Impact Strength Notched (20°C)	6.88	kJ/m ²	ISO179/1eU*
Charpy Impact Strength Unnotched (20°C)	18.47	kJ/m ²	ISO179/1eU*

Thermal properties	Values	Units	Method
Heat Deflection Temperature (0.45 MPa)	54	°C	ISO 75-2/B

*Modified procedure according to ISO 179/1eU

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