

Polypropylene FibrQ compound (20% wood fibers)

Description:

Compounded formulation comprising polypropylene (impact copolymer) with 20 wt% FibrQ mixed via a Twin-screw extruder. The samples also include 2% coupling agent (conventional MAPP). No further additives were used, such as impact modifier or flowability aids, though they could be used to further improve some of the properties.



FibrQ is Biofiber Tech's product, consisting of surface-modified wood fibers with enhanced hydrophobicity, low moisture absorption and high flowability within polymer matrices.

General

Processing Method	Injection molding
Forms	Pellets
Filler	Surface modified wood fiber, 20% filler by weight
Density	Ca. 0.99 g/cm ³
Renewable carbon content	20%
Recommended Processing temperature	165-185°C
Code name	PP01-20

Typical properties:

Feature	Method	Unit	Values
Tensile strength at Break	ISO 527-2:2012	MPa	30
Tensile modulus	ISO 527-2:2012	MPa	2000
Elongation at Break	ISO 527-2:2012	%	5
Flexural modulus	ISO 178:2010	MPa	1750
Impact strength (Charpy unnotched; 23°C)	ISO 179-1:2010	kJ/m ²	19
MFI (190°C, 5kg)	ISO 1133-1:2012	(g/10 min)	20
Heat Deflection Temperature	ISO 75-1; Method A; 120K/min	°C	72.6
Shrinkage rate	ISO 294-4	%	1.13

The values were measured on standardized test specimens and can be affected by pigmentation, mould design and processing conditions. Biofiber Tech is therefore not responsible for the accuracy of the provided values and cannot give any warranty with regard to the correctness.

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