Polypropylene

Fibremod™ GD301FE

Polypropylene Compound, Glass Fibre Reinforced

Description

Fibremod GD301FE is a 30 % chemically coupled high performance glass fibre reinforced polypropylene compound intended for injection moulding.
This material shows excellent mechanical properties also at elevated temperatures.
The product is available in standard black 9502.

Applications

Fibremod GD301FE has been developed especially for applications like:

- Front end carriers
- Door module carriers
- Fans and shrouds
- Pump housings
- Pedal carriers
- Air bag housings

Physical Properties

Property	Typical Value Data should not be used for specification work	Test Method
Density	1140 kg/m³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	4 g/10min	ISO 1133
Tensile Modulus (1 mm/min)	7.500 MPa	ISO 527-2
Tensile Strength (50 mm/min)	105 MPa	ISO 527-2
Heat Deflection Temperature B (0,45 MPa)	158 °C	ISO 75-2
Charpy Impact Strength, notched (23 °C)	12 kJ/m²	ISO 179/1eA
Charpy Impact Strength, notched (-20 °C)	10 kJ/m²	ISO 179/1eA

Values determined on standard injection moulded specimens conditioned at 23°C and 50% relative humidity after at least 96 hours storage time.

Application Related and Other Tests

Property	Typical Value Data should not be used for specification work	Test Method
Fogging (100 °C,16 h)	1 mg	DIN 75201
Emission	40 µgC/g	VDA 277

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Processing Techniques
The actual conditions will depend on the type of equipment used.

Injection Moulding
This product is easy to process with standard injection moulding machines. To avoid residual humidity from transport or storage, the material should be pre-dried approximately 2h at 80°C. Following parameters should be used as guidelines:

Feeding temperature	40 - 80 °C
Mass temperature	220 - 260 °C
Back pressure	As low as possible
Holding pressure	30 - 60 bar
Mould temperature	30 - 50 °C
Screw speed	Low to medium
Flow front speed	100 - 200 mm/s

Storage
Fibremod GD301FE should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which results in odour generation and colour changes and can have negative effects on the physical properties of this product.

Safety
The product is not classified as dangerous.

Please see our "Safety data sheet" / "Product safety information sheet" for details on various aspects of safety of the product. For more information, contact your Borealis representative.

Recycling
The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.

Please see our "Safety data sheet" / "Product safety information sheet" for details on various aspects of recovery and disposal of the product.