



Polypropylene FibremodTM GD302HP

Polypropylene Compound, Glass Fibre Reinforced

Description

Fibremod GD302HP is a 30 % chemically coupled high performance glass fibre reinforced polypropylene compound intended for injection moulding.

This material has an excellent balance between impact strength and stiffness and is easy to process.

Applications

Fibremod GD302HP has been developed especially for the automotive industry.

Dashboard carriers
Door module carriers

Structural seat parts

Special features

High impact strength

Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Density	1160 kg/m ³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	3,3 g/10min	ISO 1133
Flexural Modulus (2 mm/min)	5.100 MPa	ISO 178
Flexural Strength	86 MPa	ISO 178
Tensile Modulus (1 mm/min)	5.600 MPa	ISO 527-2
Tensile Strain at Yield	4 %	ISO 527-2
Tensile Stress at Yield	65 MPa	ISO 527-2
Heat Deflection Temperature A (1,80 MPa)	132 °C	ISO 75-2
Charpy Impact Strength, notched (23 °C)	24 kJ/m ²	ISO 179/1eA
Charpy Impact Strength, notched (-20 °C)	13 kJ/m ²	ISO 179/1eA
Charpy Impact Strength, unnotched (23 °C)	65 kJ/m ²	ISO 179/1eU
Charpy Impact Strength, unnotched (-20 °C)	60 kJ/m ²	ISO 179/1eU
Izod Impact Strength, notched (23 °C)	28 kJ/m ²	ISO 180/1A
Izod Impact Strength, notched (-20 °C)	16 kJ/m ²	ISO 180/1A

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



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Application Related and other Tests

Property	Typical Value	Test Method
Data should not be used for specification work		
Average process Shrinkage (in flow, 150x80x2 mm) ¹	0,06 %	Borealis Method
Average process Shrinkage (cross flow, 150x80x2 mm) ¹	0,80 %	Borealis Method

¹ VALUES MAY ONLY BE USED AS INDICATION, AND SHOULD NOT BE USED DIRECTLY IN MOULD DESIGN WITHOUT PRIOR VALIDATION

Processing Techniques

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

Injection Moulding

Fibremod GD302HP is easy to process with standard injection moulding machines. Following parameters should be used as guidelines:

Feeding temperature	40 - 80 °C
Mass temperature	230 - 280 °C
Back pressure	As low as possible
Holding pressure	30 - 60 MPa
Mould temperature	30 - 50 °C
Screw speed	Low to medium
Flow front speed	100 - 200 mm/s

Storage

Fibremod GD302HP 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.