



Polypropylene Compound, Glass Fibre Reinforced

Description

Fibremod GD310U is a 30% chemically coupled 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 8229.

Applications

Fibremod GD310U has been developed especially for demanding applications in under the bonnet applications.

Air ducts Lamp housings Fans and shrouds

Special Features

Very high flowability

Physical Properties

Property	Typical Value Test Method Data should not be used for specification work		
Density	1130 kg/m³	ISO 1183	
Melt Flow Rate (230 °C/2,16 kg)	10 g/10min	ISO 1133	
Flexural Modulus (2 mm/min)	6.200 MPa	ISO 178	
Tensile Strength	105 MPa	ISO 527-2	
Heat Deflection Temperature B (0,45 MPa)	162 °C	ISO 75-2	
Charpy Impact Strength, notched (23 °C)	10 kJ/m ²	ISO 179/1eA	
Charpy Impact Strength, notched (-20 °C)	9 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 Test Method Data should not be used for specification work	
Fogging (100 °C,16 h) Emission	< 2 mg < 50 µgC/g	DIN 75201 VDA 277
Mould average Shrinkage ¹	0,1 %	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

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

Storage

Fibremod GD310U 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.

