

Polypropylene

Fibremod™ GD310U

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

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

Property	Typical Value	Test Method
Data should not be used for specification work		
Density	1130 kg/m ³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	10 g/10min	ISO 1133
Tensile Modulus (1 mm/min)	7.200 MPa	ISO 527-2
Tensile Strength (50 mm/min)	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/m ²	ISO 179/1eA

Application Related and Other Tests

Property	Typical Value	Test Method
Data should not be used for specification work		
Fogging (100 °C, 16 h)	< 2 mg	DIN 75201
Emission	< 50 µgC/g	VDA 277
Spiral flow length (230°C, 40°C, 600bar)	640 mm	BTM = Borealis Test Method

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	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

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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

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.

Regional Availability

Europe

North America: grade available under the name Fibremod GD310UU

For information on regional availability please contact Borealis Sales Representative.

Issuer:

Marketing Automotive / Georg Grestenberger

Product Management / Erwin Kastner

Disclaimer

The product(s) mentioned herein are not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications.

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