



**Polypropylene**

# Fibremod™ GB311U

Polypropylene Compound, Glass Fibre Reinforced

## Description

**Fibremod GB311U** 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 GB311U** has been developed especially for demanding applications in the automotive industry.

Technical components exposed to high heat and loads

Structural parts

Washing machine parts

## Special Features

High heat stabilised

Detergent resistant

## Physical Properties

Property	Typical Value	Test Method
<small>Data should not be used for specification work</small>		
Density	1120 kg/m <sup>3</sup>	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	2,0 g/10min	ISO 1133
Flexural Modulus (2 mm/min)	6.200 MPa	ISO 178
Tensile Modulus (1 mm/min)	6.800 MPa	ISO 527-2
Tensile Strength (50 mm/min)	97 MPa	ISO 527-2
Heat Deflection Temperature B (0,45 MPa)	159 °C	ISO 75-2
Charpy Impact Strength, notched (23 °C)	11 kJ/m <sup>2</sup>	ISO 179/1eA
Charpy Impact Strength, notched (-20 °C)	9 kJ/m <sup>2</sup>	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
<small>Data should not be used for specification work</small>		
Fogging (100 °C,16 h)	1,0 mg	DIN 75201
Emission	< 50 µgC/g	VDA 277
Spiral flow length (230°C, 40°C, 600bar)	440 mm	BTM = Borealis Test Method

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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 MPa
Mould temperature	30 - 50 °C
Screw speed	Low to medium
Flow front speed	100 - 200 mm/s

### Storage

**Fibremod GB311U** 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.

### Regional Availability

Europe

For information on regional availability please contact Borealis Sales Representative.

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**Issuer:**

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