



# Polypropylene Fibremod™ GB601HP-9502

## Description

**Fibremod GB601HP-9502** is a special long glass fibre reinforced polypropylene concentrate grade intended for injection moulding and extrusion. This material is designed for the dilution process in combination with special developed dilution polypropylene grades, for example homopolymer HK060AE or copolymer BJ356MO. This combination of concentrate - dilution polypropylene should then be adjusted for a glass fibre content range of 20 - 40 % in the end product. The product is available in standard black 9502.

## Applications

**Fibremod GB601HP-9502** is intended for injection moulding of highly demanding technical applications, needing all features listed under Special features.

## Special features

High strength  
High stiffness  
Excellent impact resistance  
Very good dimensional stability

Very low moisture absorption  
High creep resistance also at high temperatures  
Very good long term heat resistance

## Physical Properties

| Property                                       | Typical Value          | Test Method |
|------------------------------------------------|------------------------|-------------|
| Data should not be used for specification work |                        |             |
| Density                                        | 1469 kg/m <sup>3</sup> | ISO 1183    |
| Flexural Modulus (2 mm/min)                    | 14.100 MPa             | ISO 178     |
| Flexural Strength                              | 195 MPa                | ISO 178     |
| Tensile Modulus (1 mm/min)                     | 15.000 MPa             | ISO 527-2   |
| Tensile Strain at Break                        | 1,1 %                  | ISO 527-2   |
| Tensile Strength                               | 135 MPa                | ISO 527-2   |
| Heat Deflection Temperature A                  | 164 °C                 | ISO 75-2    |
| Heat Deflection Temperature B                  | 167 °C                 | ISO 75-2    |
| Charpy Impact Strength, notched (23 °C)        | 23,5 kJ/m <sup>2</sup> | ISO 179/1eA |
| Charpy Impact Strength, unnotched (23 °C)      | 45 kJ/m <sup>2</sup>   | ISO 179/1eU |
| Hardness, Ball Indentation H 132/30            | 127 MPa                | ISO 2039    |

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

## 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

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 **Polypropylene**  
**Fibremod GB601HP-9502**

Mass temperature  
Back pressure  
Holding pressure  
Mould temperature  
Screw speed  
Flow front speed

240 - 280 °C  
As low as possible  
30 - 60 MPa  
40 - 80 °C  
Low to medium  
100 - 200 mm/s

**Storage**

**Fibremod GB601HP-9502** 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, recovery and disposal of the product. For more information, contact your Borealis representative.

**Recycling**

The product is suitable for recycling using modern methods of shredding and cleaning.

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

**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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