



Polypropylene

Fibremod™ GC576SFB

Polypropylene Compound, Glass Fibre Reinforced

Description

Fibremod GC576SFB is a 50 % chemically coupled high performance glass fibre reinforced polypropylene compound intended for injection moulding.

Applications

Fibremod GC576SFB has been developed especially for the automotive industry.

Fans and shrouds

Pedal carriers

Special features

Excellent mechanical properties even at high temperatures

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 (23 °C)	1350 kg/m ³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	4 g/10min	ISO 1133
Flexural Modulus (2 mm/min)	11.900 MPa	ISO 178
Flexural Strength	163 MPa	ISO 178
Tensile Modulus (1 mm/min) (23 °C)	11.800 MPa	ISO 527-2
Tensile Strain at Break (50 mm/min) (23 °C)	2 %	ISO 527-2
Tensile Stress at Yield (50 mm/min) (23 °C)	114 MPa	ISO 527-2
Heat Deflection Temperature (0,45 MPa)	160 °C	ISO 75-2
Heat Deflection Temperature (1,80 MPa)	151 °C	ISO 75-2
Charpy Impact Strength, notched (-30 °C)	48 kJ/m ²	ISO 179/1eA
Izod Impact Strength, notched (23 °C)	11,8 kJ/m ²	ISO 180/1A

Combustion Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Flammability at thickness 1 mm	Max100 mm/min	ISO 3795

Processing Techniques

The actual conditions will depend on the type of equipment used. Following parameters should be used as guidelines:

HongRong Engineering Plastics Co.,Ltd.
Head Office Tel. +85-2-6957-5415
Research Center Tel.+188 1699 6168



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To avoid residual humidity from transport or storage, the material should be pre-dried approximately 2h at 95° - 105°C. Following moulding parameters should be used as guidelines:

Feeding temperature	40 - 80 °C
Mass temperature	230 - 280 °C
Holding pressure	50-70% of injection pressure
Back pressure	Low to medium
Mould temperature	20 - 50 °C
Screw speed	Low to medium
Flow front speed	100 - 200 mm/s

Storage

Fibremod GC576SFB 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. In-house production waste should be kept clean to facilitate direct recycling.



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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.

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication; however we do not assume any liability whatsoever for the accuracy and completeness of such information.

Borealis makes no warranties which extend beyond the description contained herein. Nothing herein shall constitute any warranty of merchantability or fitness for a particular purpose.

It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.

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