

Polypropylene

Fibremod™ GE309SFB

Polypropylene Glass Fibre Reinforced Compound

Description

Fibremod™ GE309SFB is a 30 % chemically coupled high performance glass fibre reinforced polypropylene compound intended for injection moulding. This material shows excellent mechanical properties also at elevated temperatures.

Typical characteristics

Fibremod™ GE309SFB can be described with following typical characteristics:

Heat stabilised

UV stabilised

Applications

Fibremod™ GE309SFB is intended for following applications:

Exterior automotive parts

Structural parts

Other automotive parts

Physical properties

Property	Typical value *	Unit	Test method
Density	1150	kg/m ³	ISO 1183-1
Melt flow rate (230 °C/2.16 kg)	14	g/10min	ISO 1133-1
Flexural Modulus (2 mm/min) (23°C)	6200	MPa	ISO 178
Tensile stress at yield (50 mm/min) (23°C)	90	MPa	ISO 527-2
Heat deflection temperature B (0.45 MPa)	160	°C	ISO 75-2
Charpy impact strength, notched (-20 °C)	6	kJ/m ²	ISO 179-1/1eA
Charpy impact strength, notched (23 °C)	7	kJ/m ²	ISO 179-1/1eA
Charpy impact strength, notched (-30 °C)	5,5	kJ/m ²	ISO 179-1/1eA

* Data should not be used for specification work

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: To avoid residual humidity from transport or storage, the material should be pre-dried for approximately 2h at 80°C.

The following moulding parameters should be used as guidelines:

Processing setting	Typical value/range
Drying temperature	95 - 105 °C
Feeding temperature	40 - 80 °C
Mass temperature	230 - 280 °C
Back pressure	Low to medium
Holding pressure ¹	30 - 60 %
Mould temperature	30 - 50 °C
Screw speed	Low to medium
Flow front speed	100 - 200 m/min

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¹of injection pressure

Packaging and storage

Fibremod™ GE309SFB should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which can result in odour generation and colour changes and can have negative effects on the physical properties of this product.

Product compliance documents

Latest versions of product safety information sheets (PSIS), product safety data sheets (SDS) and other product liability documents are available on our website www.borealisgroup.com.

Sustainability aspects

Borealis is ever mindful of the impact of our products on the planet. We promote Design for Circularity (DfC) and Design for Recycling (DfR) to conserve natural resources and to reduce the environmental impact of products over their entire lifetime (including production, use phase and after phase). DfR helps ensure that material can be effectively recycled while maximizing the material performance efficiency.

Further information on sustainability and Design for Recycling (DfR) can be found from our websites www.borealisgroup.com and www.borealiseverminds.com.

Regional Availability

South America

For information on regional availability please contact Borealis Sales Representative.

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.

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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.

No liability can be accepted in respect of the use of any Borealis product in conjunction with any other products and/or materials. The information contained herein relates exclusively to our products when not used in conjunction with any other material unless as specifically provided for in the test methods stated above.