

Polypropylene

Fibremod™ GB317SF

Polypropylene Glass Fibre Reinforced Compound

Description

Fibremod GB317SF 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 9502.

Typical characteristics

Fibremod™ GB317SF can be described with following typical characteristics:

Good stiffness
UV stabilised

Good fatigue behaviour

Applications

Fibremod™ GB317SF is intended for following applications:

Appliances
Automotive exterior applications

Exterior applications in the construction and building industry

Physical properties

Property	Typical value *	Unit	Test method
Density	1120	kg/m ³	ISO 1183-1
Melt flow rate (230 °C/2.16 kg)	5	g/10min	ISO 1133-1
Flexural modulus (2 mm/min)	6300	MPa	ISO 178
Tensile strength (50 mm/min)	105	MPa	ISO 527-2
Heat deflection temperature B (0.45 MPa)	160	°C	ISO 75-2
Charpy impact strength, notched (23 °C)	10	kJ/m ²	ISO 179-1/1eA
Charpy impact strength, notched (-20 °C)	9	kJ/m ²	ISO 179-1/1eA

* Data should not be used for specification work

Other properties

Property	Typical value *	Unit	Test method
Fogging (100 °C, 16 h)	<2	mg	DIN 75201
Total emission (headspace)	<50	µg C/g	VDA 277
Shrinkage (in flow, 150x80x2mm)	0.1	%	Borealis Test Method
Shrinkage (cross flow, 150x80x2mm)	1.0	%	Borealis Test Method

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Processing techniques

The actual conditions will depend on the type of equipment used.

Injection Moulding:

Following parameters should be used as guidelines:

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Processing setting	Typical value/range
Feeding temperature	40 - 80 °C
Mass temperature	230 - 280 °C
Back pressure	low to medium
Holding pressure	30 - 60 MPa
Mould temperature	30 - 50 °C
Screw speed	low to medium
Flow front speed	100 -200 mm/s mm/s

Packaging and storage

Fibremod™ GB317SF 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 in 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.

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.