

PP/PE Compound

Fibremod™ GB307HP

Polypropylene Glass Fibre Reinforced Compound

Description

Fibremod™ GB3070HP is a 35% chemically coupled high performance glass fiber reinforced polypropylene compound intended for injection molding. This material shows excellent mechanical properties also at elevated temperatures. The product is available in standard black 9502.

Typical characteristics

Long term high heat stabilized

Copper (Cu) stabilized

Applications

Fibremod™ GB307HP is intended for following applications:

Structural parts

Fans and shrouds

Technical components exposed to high heat and loads

Parts for cooling systems

Air intake manifolds

Pump housings

and other demanding applications in automotive under the hood applications.

Physical properties

Property	Typical value *	Unit	Test method
Density	1180	kg/m ³	ISO 1183-1
Melt flow rate (230 °C/2.16 kg)	2.5	g/10min	ISO 1133-1
Flexural modulus (2 mm/min)	8000	MPa	ISO 178
Tensile strength (50 mm/min)	115	MPa	ISO 527-2
Heat deflection temperature B (0.45 MPa)	160	°C	ISO 75-2
Charpy impact strength, notched (23 °C)	11	kJ/m ²	ISO 179-1/1eA
Charpy impact strength, notched (-20 °C)	10	kJ/m ²	ISO 179-1/1eA

* Data should not be used for specification work

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

Processing setting	Typical value/range
Feed section temperature	40 - 80 °C
Mass temperature	220 - 260 °C
Back pressure ¹	
Holding pressure	30 - 60 MPa
Mould temperature	30 - 50 °C
Screw speed ²	
Flow front speed	100 - 200 mm/s

¹As low as possible

²Low to medium

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

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Processing techniques

Injection Molding

This product is easy to process with standard injection molding 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:

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.

Regional Availability

South America: grade available under the name GB307HPB

Asia: grade available via Borouge under the name GB307HPC

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.