

Polypropylene

Fibremod™ GB364WG

Polypropylene Glass Fibre Reinforced Compound

Description

Fibremod GB364WG is a 30% chemically coupled glass fibre reinforced polypropylene compound intended for injection moulding. The product is available in natural colour.

This material shows excellent mechanical properties also at elevated temperatures.

Typical characteristics

Fibremod™ GB364WG can be described with following typical characteristics:

Long term high heat stabilisation

UL listed

Detergent resistant

Food conformity

Applications

Fibremod™ GB364WG is intended for following applications:

Pump housings

Washing machines, dishwashers and dryers

Technical components for the white goods

Physical properties

Property	Typical value *	Unit	Test method
Density	1120	kg/m ³	ISO 1183-1
MFR 230°C/2.16kg	2	g/10min	ISO 1133-1
Flexural modulus (2 mm/min)	6000	MPa	ISO 178
Tensile strength	100	MPa	ISO 527-2
Heat deflection temperature B (0.45 MPa)	159	°C	ISO 75-2
Charpy impact strength, notched (23 °C)	12	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

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:

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Processing setting	Typical value/range
Feeding temperature	40 - 80 °C
Mass temperature	220 - 260 °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

Packaging and storage

Fibremod™ GB364WG 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.

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