

PP/PE Compound

Fibremod™ GB364WG

Polypropylene Long 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 UL94 listed
 Detergent resistant Drinking water and 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

Processing Techniques:

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

Injection Moulding:

This product is easy to process with standard injection moulding 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:

Fibremod™ is a trademark of the Borealis Group



PP/PE Compound

Fibremod™ GB364WG

| Processing setting | Typical value/range |
|---------------------|---------------------|
| Feeding temperature | 40 - 80 °C |
| Mass temperature | 220 - 260 °C |
| Back pressure | low to medium MPa |
| Holding pressure | 30 - 60 MPa |
| Mould temperature | 30 - 50 °C |
| Screw speed | low to medium m/s |
| 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.

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.

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.