



Polypropylene

Fibremod™ VG621

Polypropylene Compound, Glass Fibre Reinforced

Description

Fibremod VG621 is a 30% chemically coupled glass fibre reinforced polypropylene compound intended for injection moulding.

Applications

Fibremod VG621 has been developed especially for the car industry to be used in automotive interior parts.

Automotive interior applications
Fans and shrouds

Air filters

Special features

Very good stiffness

Very good dimensional stability

Physical Properties

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

Property	Typical Value	Test Method
Data should not be used for specification work		
Density (23 °C)	1130 kg/m ³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	5 g/10min	ISO 1133
Flexural Modulus (2 mm/min)	6.300 MPa	ISO 178
Flexural Strength	120 MPa	ISO 178
Tensile Modulus (1 mm/min) (23 °C)	7.000 MPa	ISO 527-2
Tensile Strain at Yield (50 mm/min) (23 °C)	4 %	ISO 527-2
Tensile Stress at Yield (50 mm/min) (23 °C)	86 MPa	ISO 527-2
Heat Deflection Temperature Edgewise (0,45 MPa)	157 °C	ISO 75-2
Heat Deflection Temperature Edgewise (1,80 MPa)	145 °C	ISO 75-2
Vicat softening temperature A120,	158 °C	ISO 306
Vicat softening temperature B50,	120 °C	ISO 306
Charpy Impact Strength, unnotched (23 °C)	45 kJ/m ²	ISO 179/1eU
Izod Impact Strength, notched (23 °C)	10 kJ/m ²	ISO 180/1A
Hardness, Rockwell (R-scale)	110	ISO 2039-2

Combustion Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Flammability at thickness 1 mm	Max100 mm/min	ISO 3795



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Processing Techniques

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

Fibremod VG621 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 95° - 105°C. Following parameters should be used as guidelines:

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

Storage

Fibremod VG621 should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which results in odour generation and colour changes and can have negative effects on the physical properties of this product.

Safety

The product is not classified as dangerous. Please see our "Safety data sheet" / "Product safety information sheet" for details on various aspects of safety, recovery and disposal of the product. For more information, contact your Borealis representative.

Recycling

The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.