



Polypropylene Compound, Glass Fibre Reinforced

#### **Description**

**Fibremod GE277AI** is a 20 % chemically coupled high performance glass fibre reinforced polypropylene compound intended for injection moulding.

This material has an excellent balance between impact strength and stiffness and is easy to process.

The product is available in standard black 9502.

### **Applications**

**Fibremod GE277AI** has been developed especially for demanding applications in the automotive industry. has been developed especially for applications like:

Structural parts
Other automotive parts

Instrument panel carriers

# **Special features**

Fibremod GE277AI is suitable for processing with foaming technologies.

Very high flowability

## **Physical Properties**

Property	Typical Value Test Method Data should not be used for specification work		
Density	1040 kg/m³	ISO 1183	
Melt Flow Rate (230 °C/2,16 kg)	12 g/10min	ISO 1133	
Flexural Modulus (2 mm/min)	4.200 MPa	ISO 178	
Tensile Strength	85 MPa	ISO 527-2	
Heat Deflection Temperature B (0,45 MPa)	155 °C	ISO 75-2	
Charpy Impact Strength, notched (23 °C)	11 kJ/m²	ISO 179/1eA	
Charpy Impact Strength, notched (-20 °C)	10 kJ/m²	ISO 179/1eA	

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

## **Application Related and other Tests**

Property	Typical Value  Data should not be used for spec	Test Method ification work
Fogging (100 °C,16 h)	< 2 mg	DIN 75201
Emission	< 50 μgC/g	VDA 277
Mould average Shrinkage <sup>1</sup>	0,1 %	Borealis Method

<sup>1</sup> VALUES MAY ONLY BE USED AS INDICATION, AND SHOULD NOT BE USED DIRECTLY IN MOULD DESIGN WITHOUT PRIOR VALIDATION







## **Processing Techniques**

Fibremod GE277AI is recommended to pre-dry before processing. A guideline is to dry the material 3 hours at 80°C.

#### **Injection Moulding**

This product is easy to process with standard injection moulding machines.

Following moulding parameters should be used as guidelines:

Feeding temperature 40 - 80 °C

Mass temperature 220 - 260 °C

Back pressure Low to medium

Holding pressure 30 - 70 MPa

Mould temperature 30 - 70 °C

Screw speed Low to medium

Flow front speed 100 - 200 mm/s

## **Storage**

**Fibremod GE277AI** 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.

Please see our "Safety data sheet" / "Product safety information sheet" for details on various aspects of recovery and disposal of the product.

