Polypropylene

Fibremod™ GE277AI

Polypropylene Glass Fibre Reinforced Compound

Description

Fibremod™ GE277AI is a 20% chemically coupled glass fibre reinforced polypropylene compound intended for injection molding. This material has an excellent balance between impact strength and stiffness and is compatible with foam injection molding technology

The product is available in standard black 9502.

Typical characteristics

Fibremod™ GE277AI can be described with following typical characteristics:

High flowability Good impact strength

High rigidity

Applications

Fibremod™ GE277AI is intended for following applications:

Automotive interior applications Center consoles
Instrument panel carriers Structural interior parts

Physical properties

Property	Typical value *	Unit	Test method
Density	1040	kg/m³	ISO 1183-1
Melt flow rate (230 °C/2.16 kg)	12	g/10min	ISO 1133-1
Tensile modulus (1 mm/min)	4900	MPa	ISO 527-2
Tensile strength (50 mm/min)	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 179-1/1eA
Charpy impact strength, notched (-20 °C)	10	kJ/m² * Data s	ISO 179-1/1eA 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.

Other properties

Property	Typical value *	Unit	Test method
Fogging (100 °C,16 h)	<1.5	mg	DIN 75201
Total emission (headspace)	<40	μg C/g	VDA 277
Spiral flow length (230 °C, 40 °C, 600 bar)	700	mm	Borealis test method

^{*} Data should not be used for specification work

Processing techniques

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:

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Processing setting	Typical value/range
Feeding temperature	40 - 80 °C °C
Mass temperature	210 - 250 °C °C
Holding pressure	30 - 60 bar bar
Back pressure	low to medium
Mould temperature	30 - 70 °C °C
Screw speed	low to medium
Flow front speed	100 - 200 mm/s mm/s

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

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

Europe

North America: grade available under the name Fibremod GE277AIU

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.

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.





