PRODUCT DATA SHEET

Polypropylene
Borcom™ WG140AI

Description
Borcom WG140AI is a polypropylene microcomposite intended for injection moulding. This material has an excellent balance between impact strength and stiffness, high melt flow rate and gives a good surface quality.

Applications
Borcom WG140AI has been developed especially for applications like:

Climate control housings
Air ducts

Special Features

Long term high heat stabilised
Excellent surface appearance
UL registered under File E108112

Physical Properties

Property	Typical Value Data should not be used for specification work	Test Method
Density	980 kg/m³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	20 g/10min	ISO 1133
Flexural Modulus	2.500 MPa	ISO 178
Tensile Strength (50 mm/min)	37 MPa	ISO 527-2
Heat Deflection Temperature B (0,45 MPa)	120 °C	ISO 75-2
Charpy Impact Strength, notched (23 °C)	3,5 kJ/m²	ISO 179/1eA
Charpy Impact Strength, notched (-20 °C)	1,5 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 specification work	Test Method
Mould average Shrinkage [1]	1,5 %	Borealis Method

[1] VALUES MAY ONLY BE USED AS INDICATION, AND SHOULD NOT BE USED DIRECTLY IN MOULD DESIGN WITHOUT PRIOR VALIDATION

BOREALIS

Polypropylene
Borcom WG140AI

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:

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

Storage
Borcom WG140AI 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 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.

Regional Availability
Europe
For information on regional availability please contact Borealis Sales Representative.