

Technical Data Sheet



Polypropylene BG055AI

Block Copolymer for Injection Moulding

DESCRIPTION

BG055AI 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 superior gloss and surface quality.

APPLICATIONS

BG055AI is designed for:

- Air ducts
- Climate control housings
- Trunk claddings
- Household applications
- Control panels

SPECIAL FEATURES

- Long term high heat stabilised
- UL registered under File E108112
- Excellent flowability

PHYSICAL PROPERTIES

Property	Typical Value	Test Method
Data should not be used for specification work		
Density	920 kg/m ³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	22 g/10min	ISO 1133
Melt Flow Rate (230 °C/5,0 kg)	96 g/10min	ISO 1133
Flexural Modulus (2 mm/min)	1.850 MPa	ISO 178
Tensile Modulus (1 mm/min)	2.000 MPa	ISO 527-2
Tensile Stress at Yield (50 mm/min)	35 MPa	ISO 527-2
Heat Deflection Temperature A (1,80 MPa)	60 °C	ISO 75-2
Heat Deflection Temperature B (0,45 MPa)	108 °C	ISO 75-2
Vicat softening temperature (10 N)	156 °C	ISO 306
Vicat softening temperature (50 N)	95 °C	ISO 306
Charpy Impact Strength, notched (23 °C)	4 kJ/m ²	ISO 179/1eA
Charpy Impact Strength, notched (-20 °C)	1,5 kJ/m ²	ISO 179/1eA
Charpy Impact Strength, unnotched (23 °C)	102 kJ/m ²	ISO 179/1eU
Charpy Impact Strength, unnotched (-20 °C)	35 kJ/m ²	ISO 179/1eU
Izod Impact Strength, notched (23°C)	32 J/m	ASTM D 256
Izod Impact Strength, notched (-20°C)	18 J/m	ASTM D 256
Hardness, Ball Indentation 358 N/30 s	85 MPa	ISO 2039

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



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APPLICATION RELATED TESTS

Property	Typical Value	Test Method
Data should not be used for specification work		
Gloss on 2 mm plaque arc 45°	75 %	ASTM D523
Mould Shrinkage (circular disc 2mm)	1,5 %	Borealis Method

PROCESSING TECHNIQUES

This product is easy to process with standard injection moulding machines. Following parameters should be used as guidelines:

Feeding temperature	40 - 80 °C
Mass temperature	220 - 260 °C
Back pressure	Low to medium
Holding pressure 3	0 - 60 MPa
Mould temperature	30 - 50 °C
Screw speed	Low to medium
Flow front speed	100 - 200 mm/s

STORAGE

BG055AI 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.

More information on storage can be found in Safety Data Sheet for this product.

SAFETY

The product is not classified as a dangerous preparation.

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 Borouge 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.

RELATED DOCUMENTS

The following related documents are available on request, and represent various aspects on the usability, safety, recovery and disposal of the product.

Safety Data Sheet
Statement on chemicals, regulations and standards
Statement on compliance to food contact regulations



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.

Borouge 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.

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