



Polypropylene BC250MO

Description

BC250MO is a very high impact polypropylene heterophasic copolymer intended for injection moulding. This grade is characterized by combination of good stiffness, good creep resistance and very high impact strength even at low temperatures. This grade features high impact strength, high thermal stability and very good processability. As all polypropylenes, this grade shows excellent stress-cracking and chemical resistances.

This grade is mildly nucleated to maximize the mechanical stiffness. The additive formulation provides a smooth demoulding. Nucleation, good flow properties and high stiffness create a high potential for cycle time reduction. Its very good organoleptic properties allows this grade to be used with any masterbatch without discoloring problems.

Applications

Crates and boxes
Pallets
Technical parts

Bottle trays
Luggage
Containers

Special features

Very good processability
High melt stability
Good stress crack resistance

Good chemical resistance
Good stiffness

Physical Properties

Property	Typical Value	Test Method
<small>Data should not be used for specification work</small>		
Density	904 kg/m ³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	4 g/10min	ISO 1133
Tensile Modulus (1 mm/min)	1.200 MPa	ISO 527-2
Tensile Strain at Yield (50 mm/min)	5,5 %	ISO 527-2
Tensile Stress at Yield (50 mm/min)	22,5 MPa	ISO 527-2
Heat Deflection Temperature (0,45 N/mm ²) ¹	90 °C	ISO 75-2
Instrumented Falling Weight	Max Force	ISO 6603-2
(0 °C)	Total Penetration Energy	48 J
Instrumented Falling Weight	Max Force	ISO 6603-2
(-40 °C)	Total Penetration Energy	41 J
Instrumented Falling Weight	Max Force	ISO 6603-2
(-20 °C)	Total Penetration Energy	46 J
Charpy Impact Strength, notched (23 °C)	20 kJ/m ²	ISO 179/1eA
Charpy Impact Strength, notched (-20 °C)	7,5 kJ/m ²	ISO 179/1eA
Hardness, Rockwell (R-scale)	80	ISO 2039-2

¹ Measured on injection moulded specimens acc. to ISO 1873-2



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Processing Techniques

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

Following moulding parameters should be used as guidelines:

Melt temperature	230 - 260 °C	
Holding pressure	200 - 500 bar	Minimum to avoid sink marks.
Mould temperature	10 - 30 °C	
Injection speed	As high as possible.	

Shrinkage 1 - 2 %, depending on wall thickness and moulding parameters

Storage

BC250MO 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 a dangerous preparation.

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 for details on various aspects of safety, recovery and disposal of the product, for more information contact your Borealis representative.

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
 Recovery and disposal of polyolefins
 Information on emissions from processing and fires
 Statement on compliance to food contact regulations



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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.

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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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