



# Polypropylene BC650MO

## Description

**BC650MO** is a very high impact polypropylene heterophasic copolymer intended for injection moulding. This product offers a good UV resistance, further enhanced by pigmentation. 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 characterized by combination of good stiffness, good creep resistance and very high impact strength even at low temperatures.

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.

**CAS-No.** 9010-79-1

## Applications

Crates and boxes  
Pallets  
Technical parts

Bottle trays  
Luggage

## Special features

Good processability  
Good stiffness  
Good creep performance  
High melt stability

High impact strength  
Very good stress crack resistance  
Very good chemical resistance

## Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Density	905 kg/m <sup>3</sup>	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	4 g/10min	ISO 1133
Flexural Modulus	1.100 MPa	ISO 178
Tensile Modulus (50 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)	23 MPa	ISO 527-2
Heat Deflection Temperature (0,45 N/mm <sup>2</sup> ) <sup>1</sup>	80 °C	ISO 75-2
Charpy Impact Strength, notched (23 °C)	25 kJ/m <sup>2</sup>	ISO 179/1eA
Charpy Impact Strength, notched (-20 °C)	7,5 kJ/m <sup>2</sup>	ISO 179/1eA

<sup>1</sup> Measured on injection moulded specimens acc. to ISO 1873-2

## Processing Techniques

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



# Polypropylene BC650MO

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

**BC650MO** 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.

## 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 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" / "Product safety information sheet"  
 Recovery and disposal of polyolefins  
 Information on emissions from processing and fires  
 Statement on compliance to food contact regulations



**Polypropylene**  
**BC650MO**

**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.