



**Polypropylene**  
**BC545MO**  
Polypropylene Copolymer

**Description**

**BC545MO** is a low-blush polypropylene heterophasic copolymer. 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 high stiffness, very high impact strength, low stress whitening and good electrical properties.

This grade is mildly nucleated to maximize the stiffness-impact balance. The additive formulation provides long-term heat stability. Its very good organoleptic properties allows this grade to be used with any masterbatch without discoloring problems.

**Applications**

Suitcases  
Battery cases  
Crates and boxes

Technical parts  
Communication cables (UL 444)

**Special Features**

Good processability  
Good melt stability  
Very good stress crack resistance  
Very good chemical resistance

High stiffness  
High impact strength  
Good conductor adhesion  
Dielectric properties

**Physical Properties**

| Property  | Typical Value         | Test Method |
|---|-----------------------|-------------|
| Density   | 908 kg/m <sup>3</sup> | ISO 1183    |
| Melt Flow Rate (230 °C/2,16 kg)                       | 3,5 g/10min           | ISO 1133    |
| Flexural Modulus (2 mm/min)                           | 1.200 MPa             | ISO 178     |
| Tensile Strength (50 mm/min)                          | 25 MPa                | ISO 527-2   |
| Heat Deflection Temperature B (0,45 MPa) <sup>1</sup> | 90 °C                 | ISO 75-2    |
| Charpy Impact Strength, notched (23 °C)               | 12 kJ/m <sup>2</sup>  | ISO 179/1eA |
| Charpy Impact Strength, notched (-20 °C)              | 6 kJ/m <sup>2</sup>   | ISO 179/1eA |

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

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

**Processing Techniques**

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

Following moulding parameters should be used as guidelines:



# Polypropylene BC545MO

|                      |                 |
|----------------------|-----------------|
| Feeding temperature  | 40 - 80 °C      |
| Mass temperature     | 230 - 260 °C    |
| Holding pressure     | 30 - 60 bar     |
| Back pressure        | Low to medium   |
| Mould temperature    | 30 - 50 °C      |
| Conductor protecting | 120 - 150 °C    |
| Cooling water        | 25 - 40 °C      |
| Screw speed          | Low to medium   |
| Flow front speed     | 100 - 200 m/min |

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

## Storage

**BC545MO** 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 products are 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.

## Regional Availability

Europe

For information on regional availability please contact Borealis Sales 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**  
**BC545MO**

**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.