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 Data should not be used for specification work	Test Method
Density	905 kg/m³	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/mm²) [1]	80 °C	ISO 75-2
Charpy Impact Strength, notched (23 °C)	25 kJ/m²	ISO 179/1eA
Charpy Impact Strength, notched (-20 °C)	7,5 kJ/m²	ISO 179/1eA

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

Processing Techniques

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

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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

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