

Polypropylene

BC250MO

Polypropylene Heterophasic Copolymer

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.

Cas No. 9010-79-1

Typical characteristics

BC250MO can be described with following typical characteristics:

Very good processability

High melt stability

Good stress crack resistance

Good stiffness

Good chemical resistance

Applications

BC250MO is intended for following applications:

Bottle trays

Boxes and crates

Luggage

Pallets

Technical parts

Houseware containers

Physical properties

Property	Typical value *	Unit	Test method
Density	905	kg/m ³	ISO 1183-1
Melt flow rate (230 °C/2.16 kg)	4	g/10min	ISO 1133-1
Flexural modulus	1100	MPa	ISO 178
Tensile modulus (1 mm/min)	1200	MPa	ISO 527-2
Tensile stress at yield (50 mm/min)	23	MPa	ISO 527-2
Tensile strain at yield (50 mm/min)	5.5	%	ISO 527-2
Charpy impact strength, notched (23 °C)	25	kJ/m ²	ISO 179-1/1eA
Charpy impact strength, notched (-20 °C)	7.5	kJ/m ²	ISO 179-1/1eA
Heat deflection temperature B (0.45 MPa) ¹	80	°C	ISO 75-2

* Data should not be used for specification work

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

Processing techniques

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

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Processing setting	Typical value/range
Melt temperature	230 - 260 °C
Holding pressure ²	200 - 500 bar
Mould temperature	10 - 30 °C
Injection speed	As high as possible.

² Minimum to avoid sink marks.

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

Packaging and storage

BC250MO should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which can result in odour generation and colour changes and can have negative effects on the physical properties of this product.

Product compliance documents

Latest versions of product safety information sheets (PSIS), product safety data sheets (SDS) and other product liability documents are available in our website www.borealisgroup.com.

Sustainability aspects

Borealis is ever mindful of the impact of our products on the planet. We promote Design for Circularity (DfC) and Design for Recycling (DfR) to conserve natural resources and to reduce the environmental impact of products over their entire lifetime (including production, use phase and after phase). DfR helps ensure that material can be effectively recycled while maximizing the material performance efficiency. Further information on sustainability and Design for Recycling (DfR) can be found from our websites www.borealisgroup.com and www.borealiseverminds.com.

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