# Polypropylene

# **Borealis BD950MO**

## Polypropylene Heterophasic Copolymer

## Description

BD950MO is a heterophasic copolymer. This grade is intended for compression and injection moulding. The main features of this grade are good stiffness and impact resistance, very good processability, high melt strength, and extremely low tendency to stress whitening.

This grade uses Borealis Nucleation Technology (BNT) to increase productivity by cycle time reduction. As with all BNT grades, products exhibit excellent dimensional consistency with different colorants. In addition, this grade provides excellent creep resistance and optimum stiffness-impact balance. This polymer contains slip and antistatic additives to ensure good demoulding properties, low dust attraction, and low friction coefficient which meets the industry standards for closure opening torques.

Cas No. 9010-79-1

#### **Typical characteristics**

Borealis BD950MO can be described with following typical characteristics:

Very good processability	High creep performance
Very good stiffness and impact balance	Low friction

## Applications

Borealis BD950MO is intended for following applications:

Caps and closures for beverage and food

Caps and closures for industrial packaging

## **Physical properties**

Property	Typical value *	Unit	Test method
Density	905	kg/m³	ISO 1183-1
Melt flow rate (230 °C/2.16 kg)	7	g/10min	ISO 1133-1
Flexural modulus	1400	MPa	ISO 178
Tensile modulus (1 mm/min)	1500	MPa	ISO 527-2
Tensile stress at yield (50 mm/min)	30	MPa	ISO 527-2
Tensile strain at yield (50 mm/min)	6	%	ISO 527-2
Charpy impact strength, notched (23 °C)	8	kJ/m²	ISO 179-1/1eA
Charpy impact strength, notched (-20 °C)	4	kJ/m²	ISO 179-1/1eA
Heat deflection temperature B (0.45 MPa)	90	°C * Data s	ISO 75-2 hould not be used for specification work

## **Processing techniques**

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

Processing setting	Typical value/range
Melt temperature	230 - 250 °C
Holding pressure <sup>1</sup>	200 - 500 bar
Mould temperature	1 - 30 °C
Injection speed	As high as possible



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<sup>1</sup> Minimum to avoid sink marks

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

#### **Packaging and storage**

Borealis BD950MO 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 on 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.

#### 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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