

## Polypropylene

# BH381MO

## Polypropylene Heterophasic Copolymer

### Description

BH381MO is a heterophasic copolymer. This product is characterized by an optimum combination of very high stiffness and high impact strength.

This grade uses Borealis Nucleation Technology (BNT) to increase productivity by cycle time reduction. BNT in combination with excellent stiffness and good flow properties creates a high potential for wall-thickness reduction. Products originating from this grade have very good demoulding properties, well-balanced mechanical properties, excellent dimension consistency with respect to different colors, and good organoleptic properties.

Cas No. 9010-79-1

### Typical characteristics

BH381MO can be described with following typical characteristics:

High stiffness

Very good flow behaviour

High impact strength

### Applications

BH381MO is intended for following applications:

Boxes and crates

Technical parts

Foaming applications

Thin wall packaging

Houseware

Foamed food packaging

Pails

### Physical properties

| Property                                  | Typical value * | Unit              | Test method   |
|-------------------------------------------|-----------------|-------------------|---------------|
| Density                                   | 905             | kg/m <sup>3</sup> | ISO 1183-1    |
| Melt flow rate ( 230 °C/2.16 kg)          | 35              | g/10min           | ISO 1133-1    |
| Flexural modulus                          | 1600            | MPa               | ISO 178       |
| Tensile modulus ( 1 mm/min)               | 1700            | MPa               | ISO 527-2     |
| Tensile stress at yield ( 50 mm/min)      | 29              | MPa               | ISO 527-2     |
| Tensile strain at yield ( 50 mm/min)      | 5               | %                 | ISO 527-2     |
| Charpy impact strength, notched ( 23 °C)  | 6.5             | kJ/m <sup>2</sup> | ISO 179-1/1eA |
| Charpy impact strength, notched ( -20 °C) | 3.5             | kJ/m <sup>2</sup> | ISO 179-1/1eA |
| Heat deflection temperature B ( 0.45 MPa) | 105             | °C                | ISO 75-2      |

\* Data should not be used for specification work

### Processing techniques

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

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| Processing setting            | Typical value/range  |
|-------------------------------|----------------------|
| Melt temperature              | 210 - 280 °C         |
| Holding pressure <sup>1</sup> | 200 - 500 bar        |
| Mould temperature             | 10 - 30 °C           |
| Injection speed               | As high as possible. |

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

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

### Packaging and storage

BH381MO 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](http://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](http://www.borealisgroup.com) and [www.borealiseverminds.com](http://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.

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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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