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PRODUCT DATA SHEET

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
High impact strength
Very good flow behaviour

Applications

BH381MO is intended for following applications:

Boxes and crates
Foaming applications
Houseware
Pails
Technical parts
Thin wall packaging
Foamed food packaging

Physical properties

Property	Typical value *	Unit	Test method
Density	905	kg/m³	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/m²	ISO 179-1/1eA
Charpy impact strength, notched (-20 °C)	3.5	kJ/m²	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 [1]	200 - 500 bar
Mould temperature	10 - 30 °C
Injection speed	As high as possible.

[1] *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.

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.
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.

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