

Polypropylene BorPure™ HJ311MO

Product Data Sheet

Polypropylene BorPure™ HJ311MO

Homopolymer for Injection Moulding

DESCRIPTION

BorPure™ HJ311MO is a high flow polypropylene homopolymer for thin wall packaging and products with high flow length. It is based on proprietary Borstar Nucleation Technology (BNT) combined with unique Borstar reactor design.

BorPure™ HJ311MO is designed for high speed injection moulding and contains antistatic additive.

This polymer is characterized by excellent organoleptic properties and efficient processing due to BNT nucleation and high flowability. Articles moulded from this product exhibit good dimensional stability and good stiffness / impact – balance.

APPLICATIONS

Take away food packaging
Thin walled containers
Media packaging
Rectangular and flat products, like lids and trays

SPECIAL FEATURES

High melt flow
Excellent organoleptic performance
Good stiffness/impact –balance

Very fast processing
Good demoulding properties
Low warpage

PHYSICAL PROPERTIES

Property	Typical Value	Test Method
Density	900-910 kg/m ³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	60 g/10min	ISO 1133
Tensile Modulus (1 mm/min)	1750 MPa	ISO 527-2
Tensile Strain at Yield (50 mm/min)	9 %	ISO 527-2

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Tensile Stress at Yield (50 mm/min)	37 MPa	ISO 527-2
Flexural modulus (5 mm/min)	1750 MPa	ISO 178
Flexural modulus (by 1% secant)	1700 MPa	ASTM D790A
Charpy Impact Strength, notched (23 °C)	2.2 kJ/m ²	ISO 179/1eA
IZOD Impact Strength, notched (23 °C)	23 J/m	ASTM D256
Heat Deflection Temperature (0,45 N/mm ²)*	108 °C	ISO 75-2
Vicat Softening Temperature (Method A) **	145 °C	ISO 306
Hardness, Rockwell (R-scale)	108	ISO 2039-2

*Data should not be used for specification work

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

** Measured on injection moulded specimens, conditioned at 23°C and 50% Rel. Hum.

PROCESSING TECHNIQUES

BorPure™ HJ311MO is easy to process with standard injection moulding machines.

Following parameters should be used as guidelines:

Melt temperature: 210 - 260 °C

Holding pressure: 200 - 500 bar As required 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

BorPure™ HJ311MO 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.

More information on storage can be found in Safety Information Sheet (SIS) for this product.

SAFETY

The product is not classified as a hazardous preparation.

Please see our Safety Information Sheet (SIS) for details on various aspects of safety, recovery and disposal of the product, for more information contact your Borouge representative.

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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.

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 Information Sheet

Statement on chemicals, regulations and standards

Statement on compliance to food contact regulations

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.

Borouge makes no warranties which extend beyond the description contained herein. Nothing herein shall constitute any warranty of merchantability or fitness for a particular purpose.

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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