

## Polypropylene BE961MO

### Product Data Sheet

# Polypropylene BE961MO

## Block Copolymer for Injection Moulding

### DESCRIPTION

**BE961MO** is a heterophasic copolymer. This product is characterized by an optimum combination of high stiffness, low creep and very high impact strength.

This product uses Borstar Nucleation Technology (BNT) to increase productivity by cycle time reduction.

Articles produced with this product have very good demoulding properties, well-balanced mechanical properties and excellent dimension consistency with respect to different colors.

### APPLICATIONS

Crates and boxes

Ice cream containers

Pails

Appliances

Luggage

Technical parts

### SPECIAL FEATURES

High impact strength, even at low temperatures

Excellent dimensional stability

Good flow behaviour

### PHYSICAL PROPERTIES

| Property                            | Typical Value             | Test Method |
|-------------------------------------|---------------------------|-------------|
| Density                             | 900-910 kg/m <sup>3</sup> | ISO 1183    |
| Melt Flow Rate (230 °C/2,16 kg)     | 12 g/10min                | ISO 1133    |
| Tensile Modulus (1 mm/min)          | 1200 MPa                  | ISO 527-2   |
| Tensile Strain at Yield (50 mm/min) | 5.3 %                     | ISO 527-2   |
| Tensile Stress at Yield (50 mm/min) | 23 MPa                    | ISO 527-2   |

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|  |                      |             |
|--|----------------------|-------------|
| Flexural modulus (5 mm/min)                            | 1250 MPa             | ISO 178     |
| Tensile Strain at Yield                                | 5.3 %                | ASTM D738   |
| Tensile Stress at Yield                                | 23 MPa               | ASTM D738   |
| Flexural modulus (by 1% secant)                        | 1200 MPa             | ASTM D790A  |
| Charpy Impact Strength, notched (23 °C)                | 14 kJ/m <sup>2</sup> | ISO 179/1eA |
| Charpy Impact Strength, notched (-20 °C)               | 7 kJ/m <sup>2</sup>  | ISO 179/1eA |
| IZOD Impact Strength, notched (23 °C)                  | 160 J/m              | ASTM D256   |
| IZOD Impact Strength, notched (-20 °C)                 | 75 J/m               | ASTM D256   |
| Heat Deflection Temperature (0,45 N/mm <sup>2</sup> )* | 92 °C                | ISO 75-2    |
| Vicat Softening Temperature (Method A) **              | 144 °C               | ISO 306     |
| Hardness, Rockwell (R-scale)                           | 87                   | 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

This product 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

**BE961MO** 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.

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### 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.

### 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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