

Polypropylene BD950MO

Product Data Sheet

Polypropylene BD950MO

Block Copolymer for Injection Moulding and Compression Moulding

DESCRIPTION

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

This product uses Borstar Nucleation Technology (BNT) to increase productivity by cycle time reduction. As with all BNT products, **BD950MO** exhibits excellent dimensional consistency with different color additives.

This polymer contains slip and antistatic additives to ensure good demoulding properties, low dust attraction and low friction coefficient, meeting the industry standards for closure opening torques.

APPLICATIONS

Caps and closures for beverage, food and industrial packaging

Technical applications

Luggage

SPECIAL FEATURES

Very good processability

Good creep performance

Very good stiffness and impact balance

Low stress-whitening

High Gloss

PHYSICAL PROPERTIES

Property	Typical Value	Test Method
Density	900-910 kg/m ³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	7 g/10min	ISO 1133
Tensile Modulus (1 mm/min)	1500 MPa	ISO 527-2

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Tensile Strain at Yield (50 mm/min)	6 %	ISO 527-2
Tensile Stress at Yield (50 mm/min)	30 MPa	ISO 527-2
Flexural modulus (5 mm/min)	1450 MPa	ISO 178
Tensile Strain at Yield	7 %	ASTM D738
Tensile Stress at Yield	30 MPa	ASTM D738
Flexural modulus (by 1% secant)	1450 MPa	ASTM D790A
Charpy Impact Strength, notched (23 °C)	8 kJ/m ²	ISO 179/1eA
Charpy Impact Strength, notched (-20 °C)	4 kJ/m ²	ISO 179/1eA
IZOD Impact Strength, notched (23 °C)	85 J/m	ASTM D256
IZOD Impact Strength, notched (-20 °C)	50 J/m	ASTM D256
Heat Deflection Temperature (0,45 N/mm ²)*	100 °C	ISO 75-2
Vicat Softening Temperature (Method A) **	149 °C	ISO 306
Hardness, Rockwell (R-scale)	92	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.

The grade can also be moulded by the compression moulding process.

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Then, the following processing guidelines can be given:

Extruder temperature	160 – 190 °C
Melt temperature	170 – 200 °C
Mould temperature	15 – 40 °C

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

STORAGE

BD950MO 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.

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

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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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