

Polypropylene RE420MO

Product Data Sheet

Polypropylene RE420MO

Random Copolymer for Injection Moulding and ISBM

DESCRIPTION

RE420MO is a versatile designed transparent polypropylene random ethylene copolymer with medium melt flow rate intended for injection moulding and injection stretch blow moulding.

RE420MO is suitable for high speed injection moulding due to clarification and excellent demoulding properties. Articles originating from this product have excellent transparency, good organoleptic properties, good balance of stiffness and impact strength at ambient and refrigerator temperatures, low blooming, good denesting performance and excellent hinge properties.

APPLICATIONS

Lids
Transparent pails
Customized / hinged closures
Food storage containers
Sports and drinking bottles
Houseware containers

SPECIAL FEATURES

Very good stiffness and impact balance
Good gloss and transparency
Low blooming
Excellent hinge properties

PHYSICAL PROPERTIES

Property	Typical Value	Test Method
Density	900-910 kg/m ³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	13 g/10min	ISO 1133
Tensile Modulus (1 mm/min)	1100 MPa	ISO 527-2
Tensile Strain at Yield (50 mm/min)	12 %	ISO 527-2

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Tensile Stress at Yield (50 mm/min)	28 MPa	ISO 527-2
Flexural modulus (5 mm/min)	1150 MPa	ISO 178
Flexural modulus (by 1% secant)	1100 MPa	ASTM D790A
Tensile Strain at Yield	12 %	ASTM D738
Tensile Stress at Yield	28 MPa	ASTM D738
Charpy Impact Strength, notched (23 °C)	6 kJ/m ²	ISO 179/1eA
IZOD Impact Strength, notched (23 °C)	65 J/m	ASTM D256
Heat Deflection Temperature (0,45 N/mm ²)*	75 °C	ISO 75-2
Vicat Softening Temperature (Method A) **	124.5 °C	ISO 306
Haze (2mm)	20 %	ASTM D1003
Hardness, Rockwell (R-scale)	91	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

RE420MO is easy to process with standard injection moulding machines and injection stretch blow moulding machines.

Following parameters should be used as guidelines:

Melt temperature	220 - 260 °C
Holding pressure	200 - 500 bar
Mould temperature	30 - 40 °C
Injection speed	High

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

STORAGE

RE420MO should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which results in odor generation and color 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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