



Polypropylene RE420MO

Description

RE420MO is a specially modified highly-transparent polypropylene random copolymer with medium melt flow rate. This grade is intended for injection moulding and stretch blow moulding, and is designed for high-speed injection moulding and contains nucleating and demoulding additives.

Products originating from this grade have excellent transparency, very good organoleptic properties, good balance of stiffness and impact strength at ambient temperature, low blooming and good demoulding properties.

Applications

Excellent transparency
Lids
Pails
Closures

Sweet-boxes
Bottles
Houseware containers

Special features

Very good stiffness and impact balance
Improved gloss and excellent transparency

Low blooming

Physical Properties

Property	Typical Value	Test Method
	Data should not be used for specification work	
Density	905 kg/m ³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	13 g/10min	ISO 1133
Tensile Modulus (1 mm/min)	1.100 MPa	ISO 527-2
Tensile Strain at Yield (50 mm/min)	12 %	ISO 527-2
Tensile Stress at Yield (50 mm/min)	28 MPa	ISO 527-2
Heat Deflection Temperature (0,45 N/mm ²) ¹	75 °C	ISO 75-2
Charpy Impact Strength, notched (23 °C)	6,0 kJ/m ²	ISO 179/1eA
Hardness, Rockwell (R-scale)	80	ISO 2039-2

¹ Measured on injection moulded specimens acc. to ISO 1873-2

Processing Techniques

This product is easy to process with standard injection moulding machines.

Following moulding parameters should be used as guidelines:

Melt temperature	210 - 260 °C	
Holding pressure	200 - 500 bar	Minimum to avoid sink marks.
Mould temperature	30 - 40 °C	
Injection speed	High	



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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 odour generation and colour changes and can have negative effects on the physical properties of this product.

Safety

The product is not classified as a dangerous preparation.

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.

Please see our Safety Data Sheet for details on various aspects of safety, recovery and disposal of the product, for more information contact your Borealis representative.

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 Data Sheet
Recovery and disposal of polyolefins
Information on emissions from processing and fires
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.

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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.

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