

## 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 <sup>3</sup> | 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 <sup>2</sup> | ISO 179/1eA |
| IZOD Impact Strength, notched (23 °C)                  | 65 J/m              | ASTM D256   |
| Heat Deflection Temperature (0,45 N/mm <sup>2</sup> )* | 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.

## Polypropylene RE420MO

### 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.

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