

## TECHNICAL DATA SHEET

# Polyethylene MB6561

High Density Polyethylene for Injection Moulding and Compression Moulding

### DESCRIPTION

**MB6561** is a bimodal, high-density polyethylene intended for both injection and compression moulding. This grade exhibits excellent organoleptic properties and very good flow properties. The wide molecular weight distribution guarantees superior environmental stress crack resistance.

### APPLICATIONS

Caps and closures for taste-sensitive beverages like water.  
Closures for carbonated soft drinks, tea, juices and beer.  
Consumer and industrial articles with high ESCR demands

### SPECIAL FEATURES

This product has been optimized for:  
Excellent organoleptic properties  
Superior environmental stress crack resistance  
Easy and versatile processability

### PHYSICAL PROPERTIES

Property	Typical Value	Test Method
Data should not be used for specification work		
Density	955 kg/m <sup>3</sup>	ISO 1183
Melt Flow Rate (190 °C/2,16 kg)	1,5 g/10min	ISO 1133
Tensile Modulus (1 mm/min)	900 MPa	ISO 527-2
Tensile Strain at Yield (50 mm/min)	10 %	ISO 527-2
Tensile Stress at Yield (50 mm/min)	23 MPa	ISO 527-2
FNCT test(3.5 MPa, 50°C)(Arcopal N110 2%)	100h	ISO/DIS 16700-2000
ESCR (Igepal 10 %),(F50),	180 h	ASTM D 1693-B

### PROCESSING TECHNIQUES

This product is easy to process with standard injection moulding machines, as well as on compression moulding equipment

#### a. Injection moulding

Following injection moulding parameters should be used as guidelines:

- Melt temperature 190 - 250 °C
- Mould temperature 10 - 40 °C
- Injection speed: as high as possible.
- Shrinkage 1 - 2 %, depending on wall thickness and moulding parameters

#### b. Compression moulding

In compression moulding, the following parameters can be used:

- Extruder temperature profile: 160-175°C
- Melt temperature: 180 - 200°C
- Mould temperature 10 - 40°C
- Shrinkage 1 – 2 %, depending on wall thickness and moulding parameters

### STORAGE

**MB6561** 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 Data Sheet for this product.

### SAFETY

The product is not classified as a dangerous preparation.

Please see our Safety Data Sheet / Product Safety information sheet 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 Data 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.**

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