Product Data Sheet

Polyethylene

Borstar® MB9641

High Density polyethylene for Injection Moulding

DESCRIPTION

Borstar®MB9641 is a high-density polyethylene with a narrow molecular weight distribution
The grade has good flow properties.
This grade is designed for the injection moulding of articles which require good rigidity and high impact strength, even at very low temperatures.

APPLICATIONS

Boxes – Crates

SPECIAL FEATURES

High Stiffness
Good impact strength
Good flow behavior

PHYSICAL PROPERTIES

Property	Typical Value	Test Method
Density	964 kg/m3	ISO 1183
Melt Flow Rate (190 °C/2,16 kg)	8 g/10min	ISO 1133
Tensile Modulus (1 mm/min) 1	1.200 MPa	ISO 527-2
Tensile Strain at Yield (50 mm/min)	1 8 %	ISO 527-2
Tensile Stress at Yield (50 mm/min) 1	27 MPa	ISO 527-2
Heat Deflection Temperature (0,45 MPa) 2	77 °C	ISO 75-2
Charpy Impact Strength, notched (23 °C)	7 kJ/m²	ISO 179/1eA
Charpy Impact Strength, notched (-20 °C)	6 kJ/m²	ISO 179/1eA
Hardness, Shore D	63	ISO 868

**Data should not be used for specification work*

1 Measured on injection moulded specimens acc. to ISO 1872-2
2 Measured on injection moulded specimens acc. to ISO 1873-2

PROCESSING GUIDELINES

Following parameters should be used as guidelines:

Injection Moulding

Melt temperature	210 - 275 °C
Holding pressure	As low as possible Minimum to avoid sink marks.
Mould temperature	10 - 40 °C
Injection speed	As high as possible.

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

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STORAGE

Borstar®MB9641 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

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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