PRODUCT DATA SHEET

08.04.2026 Ed.4

Polyethylene

BorPure™ MB7541

High Density Polyethylene for Injection and Compression Moulding

Description

BorPure™ MB7541 is a multimodal High Density Polyethylene intended for injection and compression moulding with a strong focus on easy process ability, excellent organoleptic performance, and high environmental stress cracking resistance (ESCR) in combination with good impact strength allowing further down weighting. The improved process ability of this grade, even at low melt temperature, allows energy savings and faster cycle time.

This grade does not contain slip agent.

Cas No. 25087-34-7

Typical characteristics

BorPure MB7541 can be described with following typical characteristics:

Excellent easy process ability

Good environmental stress crack resistance (ESCR)

Very good organoleptic properties

Good impact strength

Applications

BorPure™ MB7541 is intended for following applications:

Caps and closures for beverage and food

Consumer and industrial articles for demanding environment

Caps and closures for industrial packaging

Transport packaging

Physical properties

Property	Typical value *	Unit	Test method
Density	954	kg/m³	ISO 1183-1
Melt flow rate (190 °C/2.16 kg)	4	g/10min	ISO 1133-1
Tensile modulus (1 mm/min) [1]	950	MPa	ISO 527-2
Tensile stress at yield (50 mm/min) [1]	23	MPa	ISO 527-2
Tensile strain at yield (50 mm/min) [1]	9.6	%	ISO 527-2
Izod impact strength, notched (23 °C)	5	kJ/m²	ISO 180
Tensile Impact strength, notched (23°C) [2]	86	kJ/m²	ISO 8256/1A
Heat deflection temperature B (0.45 MPa)	61	°C	ISO 75-2
Hardness, Shore D	61	-	ISO 868
Full Notch Creep-Test (6MPa, 50 °C), (Arcopal N110 2%)	12	h	ISO/DIS 16700-2000
Environmental stress crack resistance (Igepal 10%, F50)	40	h	ASTM D 1693-A

* Data should not be used for specification work

[1] *Measured on injection moulded specimen*

[2] *Measured on compression moulded specimen in machine direction*

Processing techniques

BorPure MB7541 is easy to process with standard injection moulding machines.
Following moulding parameters should be used as guidelines:

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Processing setting	Typical value/range
Melt temperature	190 - 250 °C
Mould temperature	10 - 40 °C
Injection speed	As high as possible °C

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

Packaging and storage

BorPure MB7541 should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which can result in odour generation and colour changes and can have negative effects on the physical properties of this product.

Product compliance documents

Latest versions of product safety information sheets (PSIS), product safety data sheets (SDS) and other product liability documents are available in our website www.borealisgroup.com.

Sustainability aspects

Borealis is ever mindful of the impact of our products on the planet. We promote Design for Circularity (DfC) and Design for Recycling (DfR) to conserve natural resources and to reduce the environmental impact of products over their entire lifetime (including production, use phase and after phase). DfR helps ensure that material can be effectively recycled while maximizing the material performance efficiency. Further information on sustainability and Design for Recycling (DfR) can be found from our websites www.borealisgroup.com and www.borealiseverminds.com.

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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