

Polypropylene

HF955MO

Polypropylene Homopolymer

Description

HF955MO is a very stiff polypropylene homopolymer. This grade combines unique Borstar reactor design with Borealis Nucleation Technology (BNT) to produce highly-crystalline polypropylene.

This combination also results in unique balance of properties especially suited for high-speed injection moulding. Components moulded from this grade show good ejectability and combine excellent stiffness with good transparency and gloss, very good colour, excellent organoleptic properties and good impact strength at ambient temperatures.

Cas No. 9003-07-0

Typical characteristics

HF955MO can be described with following typical characteristics:

Good stiffness

Good impact strength

Improved gloss and excellent transparency

Excellent organoleptic properties

Applications

HF955MO is intended for following applications:

Caps and closures

Lids

Products with complicated geometry

Thin wall containers

Physical properties

Property	Typical value *	Unit	Test method
Density	905	kg/m ³	ISO 1183-1
Melt flow rate (230 °C/2.16 kg)	20	g/10min	ISO 1133-1
Flexural modulus	2000	MPa	ISO 178
Charpy impact strength, notched (23 °C)	2,5	kJ/m ²	ISO 179-1/1eA
Tensile modulus (1 mm/min)	2200	MPa	ISO 527-2
Tensile strain at yield (50 mm/min)	6	%	ISO 527-2
Tensile stress at yield (50 mm/min)	40	MPa	ISO 527-2
Heat deflection temperature B (0.45 MPa) ¹	115	°C	ISO 75-2

* Data should not be used for specification work

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

Processing techniques

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

Processing setting	Typical value/range
Melt temperature	220 - 260 °C
Holding pressure ²	200 - 500 bar
Mould temperature	15 - 60 °C
Injection speed	High

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² Minimum to avoid sink marks.

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

Packaging and storage

HF955MO 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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