PRODUCT DATA SHEET

Polypropylene

HG313MO

Polypropylene Homopolymer

Description

HG313MO is a polypropylene homopolymer intended for injection moulding. Its high melt flow makes it especially suitable for products with long flow length. This grade is designed for high-speed injection moulding and contains nucleating, antistatic and slip additives.

This polymer is a CR (controlled rheology) grade with narrow molecular weight distribution giving low warpage. Products originating from this grade have very good demoulding and anti-static properties, high stiffness, good transparency and gloss, and good impact strength at ambient temperatures.

Cas No. 9003-07-0

Typical characteristics

HG313MO can be described with following typical characteristics:

- High stiffness
- High impact strength
- Excellent antistatic properties
- Improved gloss and excellent transparency

Applications

HG313MO is intended for following applications:

- Caps and closures
- Lids
- Thin wall containers
- Houseware containers

Physical properties

Property	Typical value *	Unit	Test method
Density	905	kg/m³	ISO 1183-1
Melt flow rate (230 °C/2.16 kg)	30	g/10min	ISO 1133-1
Flexural modulus	1300	MPa	ISO 178
Charpy impact strength, notched (23 °C)	2.5	kJ/m²	ISO 179-1/1eA
Tensile modulus (1 mm/min)	1500	MPa	ISO 527-2
Tensile strain at yield (50 mm/min)	10	%	ISO 527-2
Tensile stress at yield (50 mm/min)	34	MPa	ISO 527-2
Heat deflection temperature B (0.45 MPa)[1]	90	°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

HG313MO is easy to process with standard injection moulding machines. Following parameters should be used as guidelines:

Processing setting	Typical value/range
Melt temperature	210 - 250 °C
Holding pressure [2]	200 - 500 bar
Mould temperature	10 - 30 °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

HG313MO 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.

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