

Polypropylene Homopolymer for Injection Moulding

Description

HG385MO is a polypropylene homopolymer intended for injection moulding. It is characterised by excellent flow properties combined with a narrow molecular weight distribution well suited for low distortion products.

HG385MO is produced using the Borealis Controlled Crystallinity Polypropylene (CCPP) technology. This provides a polypropylene with a very effective nucleation. Combined with an antistatic and slip formulation, that allows short cycle times, good demoulding properties, and low dust attraction.

Products moulded with **HG385MO** exhibit excellent dimension consistency (e.g. with different colours) combined with high stiffness.

Applications

HG385MO is developed for injection moulding, and especially intended for caps and closures products.

Typical application areas are:

- Caps and closures of various design, including hinge-caps, screw caps, caps with complicated flow path, child-proof caps
- Items requiring good antistatic properties

Physical Properties**

		Typical Value*	Unit	Test Method
Density		910	kg/m³	ISO 1183
Melt Flow Rate	(230°C/2.16kg)	25	g/10 min	ISO 1133
Tensile Stress at Yield	(50 mm/min)	36.5	MPa	ISO 527-2
Tenisle Strain at Yield	(50 mm/min)	8	%	ISO 527-2
Tensile Modulus	(1 mm/min)	1750	MPa	ISO 527-2
Charpy Impact Strength, notched	(+23°C)	3.5	kJ/m²	ISO 179/1eA
Hardness, Rockwell		98	R-scale	ISO 2039-2
Heat Deflection Temperature	(0.45 N/mm ²)	115	°C	ISO 75-2

^{*} Data should not be used for specification work



^{**} Values determined on injection moulded specimens acc. to ISO 1873-2 (97), based on 7 days conditioning time.



Processing Guidelines

The grade can be processed on standard injection moulding machines. Following moulding parameters should be used as guidelines.

Melt temperature 220 – 260°C Injection speed Highest possible

Holding pressure Minimum required to avoid sink marks (typical values are 200 - 500 bars)

Mould temperature 10 – 30°C

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

Storage and Handling

The product 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 the product.

Safety

HG385MO is not classified as dangerous preparation.

Dust and fines from the product carry a risk of dust explosion. All equipment should be properly earthed. Inhalation of dust should be avoided as it may cause irritation of the respiratory system.

Small amounts of fumes are generated during processing of the product. Proper ventilation is therefore required.

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.

A Safety Data Sheet is available on request. Please contact your Borealis representative for more details on various aspects of safety, recovery and disposal of the product.





Related Documents

The following related documents are available on request, and represent various aspects on the usability, safety, recovery and disposal of the product:

Recovery and disposal of Polyolefins
Information on Emissions from Processing and Fires
Safety Data Sheet, SDS
Environmental Fact Sheet

Liability statements on:

Compliance to Food Contact Regulations

Disclaimer

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