

## Polypropylene HG385MO

### Product Data Sheet

# Polypropylene HG385MO

## Homopolymer for Injection Moulding

### DESCRIPTION

**HG385MO** is a polypropylene homopolymer intended for injection moulding. This product combines unique Borstar reactor design with Borstar Nucleation Technology (BNT) to produce highly crystalline polypropylene. This product is characterized by excellent flow properties combined with a narrow molecular weight distribution, well suited for low warpage products.

This product contains anti-static and slip additives, which result in short cycle time, easy demoulding and low dust attraction.

Products moulded from this grade exhibit excellent dimension consistency combined with high stiffness and gloss.

### APPLICATIONS

Caps and closures

Appliances with high heat resistance

Household articles

### SPECIAL FEATURES

High stiffness

Heat resistance

Shows excellent antistatic performance

Low warpage

High gloss

### PHYSICAL PROPERTIES

Property	Typical Value	Test Method
Density	900-910 kg/m <sup>3</sup>	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	25 g/10min	ISO 1133
Tensile Modulus (1 mm/min)	1750 MPa	ISO 527-2

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Tensile Strain at Yield (50 mm/min)	8 %	ISO 527-2
Tensile Stress at Yield (50 mm/min)	36 MPa	ISO 527-2
Flexural modulus (5 mm/min)	1700 MPa	ISO 178
Tensile Strain at Yield	8 %	ASTM D738
Tensile Stress at Yield	36 MPa	ASTM D738
Flexural modulus (by 1% secant)	1650 MPa	ASTM D790A
Charpy Impact Strength, notched (23 °C)	4 kJ/m <sup>2</sup>	ISO 179/1eA
IZOD Impact Strength, notched (23 °C)	35 J/m	ASTM D256
Heat Deflection Temperature (0,45 N/mm <sup>2</sup> )*	108 °C	ISO 75-2
Hardness, Rockwell (R-scale)	107	ISO 2039-2

\*Data should not be used for specification work

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

## PROCESSING TECHNIQUES

**HG385MO** is easy to process with standard injection moulding machines.

Following parameters should be used as guidelines:

Melt temperature	220 - 260 °C
Holding pressure	200 - 500 bar As required to avoid sink marks.
Mould temperature	10 - 30 °C
Injection speed	As high as possible.

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

## STORAGE

**HG385MO** 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.

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### 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.

**Borouge makes no warranties which extend beyond the description contained herein. Nothing herein shall constitute any warranty of merchantability or fitness for a particular purpose.**

**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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