



# Polypropylene

# HB601WG

Polypropylene Homopolymer

## Description

**HB601WG** is a polypropylene homopolymer intended for injection moulding and blow moulding. The product is available in natural but other colours can be provided on request.

This material has excellent balanced mechanical properties and is easy to process.

## Applications

**HB601WG** has been developed especially for applications like:

Household applications  
Dishwashers components

Washing machine parts

## Special features

High heat stabilised  
UL registered under File E108112

Detergent resistant

## Physical Properties

Property	Typical Value	Test Method
<small>Data should not be used for specification work</small>		
Density	900 kg/m <sup>3</sup>	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	2,2 g/10min	ISO 1133
Flexural Modulus (5 mm/min)	1.400 MPa	ISO 178
Flexural Strength	40 MPa	ISO 178
Tensile Modulus (1 mm/min)	1.400 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 (1,80 MPa)	52 °C	ISO 75-2
Heat Deflection Temperature (0,45 MPa)	85 °C	ISO 75-2
Vicat softening temperature (10 N)	154 °C	ISO 306
Vicat softening temperature (50 N)	90 °C	ISO 306
Charpy Impact Strength, notched (23 °C)	5 kJ/m <sup>2</sup>	ISO 179/1eA
Charpy Impact Strength, unnotched (23 °C)	No break	ISO 179/1eU
Charpy Impact Strength, unnotched (-20 °C)	20 kJ/m <sup>2</sup>	ISO 179/1eU
Hardness, Ball Indentation 358 N/30 s	65 MPa	ISO 2039

Values determined on standard injection moulded specimens conditioned at 23°C and 50% relative humidity after at least 96 hours storage time.



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## Application Related Tests

Property	Typical Value	Test Method
	Data should not be used for specification work	
Average process Shrinkage (in flow, 150x80x2 mm) <sup>1</sup>	1,4 %	Borealis Method
Average process Shrinkage (cross flow, 150x80x2 mm) <sup>1</sup>	1,3 %	Borealis Method

<sup>1</sup> VALUES MAY ONLY BE USED AS INDICATION, AND SHOULD NOT BE USED DIRECTLY IN MOULD DESIGN WITHOUT PRIOR VALIDATION

## Processing Techniques

The actual conditions will depend on the type of equipment used.

### Injection Moulding

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

Feeding temperature	40 - 80 °C
Mass temperature	220 - 260 °C
Back pressure	Low to medium
Holding pressure	30 - 60 MPa
Mould temperature	30 - 50 °C
Screw speed	Low to medium
Flow front speed	100 - 200 mm/s

## Storage

**HB601WG** 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.

## Safety

The product is not classified as a dangerous preparation.

Please see our Safety Data Sheet for details on various aspects of safety of the product, for more information contact your Borealis representative.

## 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.

Please see our Safety Data Sheet for details on various aspects of recovery and disposal of the product.



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**HB601WG**

**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.

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