

## Polypropylene

# BE60-7032

## Polypropylene Homopolymer

### Description

BE60-7032 is a high molecular weight, low melt flow rate polypropylene homopolymer with fine grained  $\beta$ -modification crystalline structure leading to excellent impact strength even at low temperatures, increased hydrostatic strength and improved chemical resistance.

### Typical characteristics

BE60-7032 can be described with following typical characteristics:

High impact strength even at low temperatures

Excellent chemical resistance

Good hydrostatic strength

The material is coloured grey based on RAL 7032.

### Applications

BE60-7032 is intended for following applications:

Industrial applications

Pressure pipes

Non-pressure pipe systems

Sheets and profiles

BE60-7032 is recommended for pressure pipes and fittings, chemical engineering components, sheets, solid rods and semi-finished products which are manufactured by extrusion, injection molding or compression molding.

### Specifications

BE60-7032 and/or articles produced from it, are expected to meet the applicable requirements included in the below mentioned standards provided it is processed using sound material handling and processing practices as well as appropriate testing procedures.

EN ISO 15494

### Physical properties

| Property                                  | Typical value * | Unit              | Test method         |
|---|-----------------|-------------------|---------------------|
| Density                                   | 905             | kg/m <sup>3</sup> | ISO 1183-1/Method A |
| Melt flow rate ( 190 °C/5 kg)             | 0.50            | g/10min           | ISO 1133-1          |
| Melt flow rate ( 230 °C/2.16 kg)          | 0.30            | g/10min           | ISO 1133-1          |
| Tensile modulus                           | 1300            | MPa               | ISO 527-2           |
| Tensile strain at yield ( 50 mm/min)      | 10              | %                 | ISO 527-2           |
| Tensile stress at yield ( 50 mm/min)      | 30              | MPa               | ISO 527-2           |
| Charpy impact strength, notched ( 23 °C)  | 50              | kJ/m <sup>2</sup> | ISO 179-1/1eA       |
| Charpy impact strength, notched ( -20 °C) | 5               | kJ/m <sup>2</sup> | ISO 179-1/1eA       |
| Heat deflection temperature A ( 1.80 MPa) | 96              | °C                | ISO 75-2            |
| Vicat softening temperature B50 ( 50 N)   | 91              | °C                | ISO 306             |

\* Data should not be used for specification work

### Processing techniques

The actual processing conditions will depend on the type of equipment used. Specific recommendations can be determined only when the application and type of equipment are known. Please contact your local Borealis representative for such particulars. Following guidelines apply for extrusion:

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| Processing setting   | Typical value/range |
|----------------------|---------------------|
| Cylinder temperature | 190 - 230 °C        |
| Head temperature     | 200 - 230 °C        |
| Die temperature      | 200 - 230 °C        |
| Melt temperature     | 200 - 230 °C        |

For injection molding or compression molding different parameters may apply.

### Packaging and storage

BE60-7032 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](http://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](http://www.borealisgroup.com) and [www.borealiseverminds.com](http://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.

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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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.

No liability can be accepted in respect of the use of any Borealis product in conjunction with any other products and/or materials. The information contained herein relates exclusively to our products when not used in conjunction with any other material unless as specifically provided for in the test methods stated above.