



## Polypropylene

# BB412E

Polypropylene Block Copolymer for extrusion and injection

### Description

**BB412E** is a natural, medium molecular weight, medium melt flow rate polypropylene block copolymer with an optimal mechanical properties balance resulting in high stiffness and very good impact strength both at room temperature and at low temperatures.

### Applications

**BB412E** is recommended for pipe extrusion and injection moulding of fittings in the application field of:

Waste water discharge  
Cable conduit pipes  
Sewerage

Corrugated pipes  
Corrugated boards

**BB412E** is also recommended for conduits for electrical installations where conformity to EN 50086 is not mandatory.

### Physical Properties

| Property                                       | Typical Value         | Test Method |
|--|-----------------------|-------------|
| Data should not be used for specification work |                       |             |
| Density (23 °C)                                | 900 kg/m <sup>3</sup> | ISO 1183    |
| Melt Flow Rate (230 °C/2,16 kg)                | 1,3 g/10min           | ISO 1133    |
| Melt Flow Rate (190 °C/5 kg)                   | 2,5 g/10min           | ISO 1133    |
| Tensile Modulus                                | 1.300 MPa             | ISO 527     |
| Tensile Strain at Yield (50 mm/min)            | 8 %                   | ISO 527     |
| Tensile Stress at Yield (50 mm/min)            | 28 MPa                | ISO 527     |
| Charpy Impact Strength, notched (23 °C)        | 25 kJ/m <sup>2</sup>  | ISO 179/1eA |
| Charpy Impact Strength, notched (-20 °C)       | 5 kJ/m <sup>2</sup>   | ISO 179/1eA |

### Processing Techniques

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

#### Extrusion

|                  |              |
|------------------|--------------|
| Cylinder         | 190 - 230 °C |
| Head             | 200 - 230 °C |
| Die              | 200 - 230 °C |
| Melt temperature | 200 - 230 °C |

Specific recommendations for processing conditions can be determined only when the application and type of equipment are known. Please contact your local Borealis representative for such particulars.



# Polypropylene BB412E

## Storage

**BB412E** should be stored in dry conditions at temperatures below 60°C and protected from UV-light. Improper storage can initiate degradation.

## Safety

The product is not classified as dangerous.

## 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" / "Product safety information sheet" for details on various aspects of safety, recovery and disposal of the product. For more information, contact your Borealis representative.

## 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.

**Borealis 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.**

No liability can be accepted in respect of the use of Borealis' products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third party materials.