



Polypropylene BE50

Polypropylene Homopolymer for non-pressure pipes and extruded sheets

Description

BE50 is a high molecular weight, low melt flow rate polypropylene homopolymer characterised by high stiffness, high heat distortion temperature and high resistance to thermal ageing.

The product is available in natural colour.

Applications

BE50 is recommended for non-pressure pipes and fittings, extruder sheets, solid rods, filter plates and other extrusion applications.

Industrial
Non-pressure pipe systems

Sheets and profiles

Physical Properties

| Property | Typical Value | Test Method |
|--|--|-------------|
| | Data should not be used for specification work | |
| Density | 905 kg/m ³ | ISO 1183 |
| Melt Flow Rate (230 °C/2,16 kg) | 0,30 g/10min | ISO 1133 |
| Melt Flow Rate (190 °C/5 kg) | 0,45 g/10min | ISO 1133 |
| Tensile Modulus (1 mm/min) | 1.650 MPa | ISO 527-2 |
| Tensile Strain at Yield (50 mm/min) | 10 % | ISO 527-2 |
| Tensile Stress at Yield (50 mm/min) | 36 MPa | ISO 527-2 |
| Vicat softening temperature B50, (50 N) | 95 °C | ISO 306 |
| Charpy Impact Strength, notched (23 °C) | 7 kJ/m ² | ISO 179/1eA |
| Charpy Impact Strength, notched (-20 °C) | 2 kJ/m ² | ISO 179/1eA |

Processing Techniques

They will also depend on size and wall thickness of the pipe produced. 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.



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Storage

BE50 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 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.

Related Documents

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

Recovery and disposal of polyolefins
Information on emissions from processing and fires
"Safety data sheet" / "Product safety information sheet"
Statement on compliance to regulations for drinking water pipes



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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.

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