



Polypropylene

RP970

Polypropylene Compound

Description

RP970 is a polypropylene compound intended for injection moulding.

Applications

RP970 has been developed especially for the car industry to be used in automotive interior parts.

Interior trims

Covers

Special features

Good stiffness and impact balance

Very good flow

Physical Properties

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

Property	Typical Value	Test Method
Data should not be used for specification work		
Density (23 °C)	890 kg/m ³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	12 g/10min	ISO 1133
Flexural Modulus (2 mm/min)	850 MPa	ISO 178
Flexural Strength	23 MPa	ISO 178
Tensile Modulus (50 mm/min) (23 °C)	950 MPa	ISO 527-2
Tensile Strain at Yield (50 mm/min) (23 °C)	5 %	ISO 527-2
Tensile Stress at Yield (50 mm/min) (23 °C)	20 MPa	ISO 527-2
Heat Deflection Temperature Edgewise (1,8 MPa)	50 °C	ISO 75-2
Charpy Impact Strength, notched (23 °C)	32 kJ/m ²	ISO 179/1eA
Charpy Impact Strength, unnotched (23 °C)	No break	ISO 179/1eU
Izod Impact Strength, notched (23 °C)	30 kJ/m ²	ISO 180/1A
Izod Impact Strength, unnotched (23 °C)	No break	ISO 180/1U
Hardness, Shore D	60	ISO 868

Combustion Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Flammability at thickness 1 mm	Max100 mm/min	ISO 3795

Processing Techniques

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

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RP970 is easy to process with standard injection moulding machines. To avoid residual humidity from transport or storage, the material should be pre-dried approximately 2h at 80°C. Following moulding 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

RP970 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. 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.

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.

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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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