



Polypropylene RC007

Polypropylene Compound, Mineral Filled

Description

RC007 is a 40% mineral filled polypropylene compound intended for injection moulding.

Applications

RC007 has been developed especially for the automotive industry.

Automotive interior applications
Under the bonnet components

Engine covers

Special features

High stiffness

Improved high thermal stability

Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Density (23 °C)	1240 kg/m ³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	22 g/10min	ISO 1133
Flexural Modulus (2 mm/min)	4.500 MPa	ISO 178
Flexural Strength	46 MPa	ISO 178
Tensile Strain at Yield (50 mm/min) (23 °C)	5 %	ISO 527-2
Tensile Stress at Yield (50 mm/min) (23 °C)	33 MPa	ISO 527-2
Heat Deflection Temperature Edgewise (1,8 MPa)	85 °C	ISO 75-2
Vicat softening temperature B50,	100 °C	ISO 306
Izod Impact Strength, notched (23 °C)	2,8 kJ/m ²	ISO 180/1A
Hardness, Rockwell (R-scale)	85	ISO 2039-2

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.

RC007 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



Polypropylene RC007

Mass temperature
Back pressure
Holding pressure
Mould temperature
Screw speed
Flow front speed

220 - 260 °C
Low to medium
30 - 60 MPa
30 - 50 °C
Low to medium
100 - 200 mm/s

Storage

RC007 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.

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 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.