



Polypropylene VC105

Polypropylene Compound, Mineral Filled

Description

VC105 is a 40% mineral filled polypropylene compound intended for injection moulding.

Applications

VC105 has been developed especially for the car industry to be used in automotive interior parts.

Air ducts

Special features

Very good chemical resistance
Very good stiffness

Very good dimensional stability
High heat stabilised

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)	1240 kg/m ³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	4 g/10min	ISO 1133
Flexural Modulus (2 mm/min)	4.500 MPa	ISO 178
Flexural Strength	52 MPa	ISO 178
Tensile Stress at Yield (50 mm/min) (23 °C)	34 MPa	ISO 527-2
Heat Deflection Temperature Edgewise (1,8 MPa)	93 °C	ISO 75-2
Heat Deflection Temperature Edgewise (0,45 MPa)	135 °C	ISO 75-2
Izod Impact Strength, notched (23 °C)	3 kJ/m ²	ISO 180/1A
Izod Impact Strength, unnotched (23 °C)	16 kJ/m ²	ISO 180/1U

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.

VC105 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:

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 Polypropylene
VC105

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

40 - 80 °C
220 - 260 °C
Low to medium
30 - 60 MPa
30 - 50 °C
Low to medium
100 - 200 mm/s

Storage

VC105 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.

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Borealis Brasil S/A | Av. Osvaldo Berto, 700 | Bairro do Pinhal
| Distrito Industrial Alfredo Rela | CEP: 13255-840
| Itatiba - SP | Brasil | Website www.borealisgroup.com