



Polypropylene

MD231U

Polypropylene Compound, Mineral Filled

Description

MD231U is a 20% mineral filled polypropylene compound intended for injection moulding. This material has excellent balanced mechanical properties and a medium melt flow rate.

Applications

MD231U is designed for:

Air ducts
Air filters

Air conditioning parts
Automotive under the bonnet parts

Special Features

Long term high heat stabilised
UL registered under File E108112

High dimensional stability
Low shrinkage

Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Density	1050 kg/m ³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	6 g/10min	ISO 1133
Flexural Modulus (2 mm/min)	3.300 MPa	ISO 178
Tensile Strength (50 mm/min)	36 MPa	ISO 527-2
Heat Deflection Temperature B (0,45 MPa)	125 °C	ISO 75-2
Charpy Impact Strength, notched (23 °C)	3 kJ/m ²	ISO 179/1eA

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

Application Related and Other Tests

Property	Typical Value	Test Method
Data should not be used for specification work		
Fogging (100 °C, 16 h)	< 2 mg	DIN 75201
Emission	< 50 µgC/g	VDA 277



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Processing Techniques

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

Injection Moulding

This product 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 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

MD231U 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

Please see our "Safety data sheet" / "Product safety information sheet" for details on various aspects of safety 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.

Please see our "Safety data sheet" / "Product safety information sheet" for details on various aspects of recovery and disposal of the product.

Regional Availability

Europe

North America: grade available under the name MD231UU

For information on regional availability please contact Borealis Sales Representative.



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Issuer:

Marketing Automotive / Daniel Bahls
Product Management / Michael Otte

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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