

Polypropylene

MD231U

Polypropylene Mineral Filled Compound

Description

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

Typical characteristics

Long term high heat stabilized High dimensional stability
 UL registered under File E108112 Low shrinkage

Applications

MD231U is intended for following applications:

Air ducts Air conditioning parts
 Air filters Automotive under the bonnet parts

Physical properties

Property	Typical value *	Unit	Test method
Density	1050	kg/m ³	ISO 1183-1
Melt flow rate (230 °C/2.16 kg)	6	g/10min	ISO 1133
Flexural modulus (2 mm/min)	3200	MPa	ISO 178
Charpy impact strength, notched (23 °C)	3	kJ/m ²	ISO 179-1/1eA
Heat deflection temperature B (0.45 MPa)	125	°C	ISO 75-2
Tensile strength (50 mm/min)	35	MPa	ISO 527-2

* Data should not be used for specification work

Other properties

Property	Typical value *	Unit	Test method
Fogging (100 °C,16 h)	< 2	mg	DIN 75201
Total emission (headspace)	< 50	µg C/g	VDA 277

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Processing techniques

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:

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Processing setting	Typical value/range
Feeding temperature	40-80 °C
Mass temperature	220-260 °C
Holding pressure	30 - 60 MPa
Mould temperature	30 - 50 °C
Screw speed	low to medium
Flow front speed	100-200 mm/s

The actual conditions will depend on the type of equipment used

Packaging and storage

MD231U should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which can result in odour generation and colour changes and can have negative effects on the physical properties of this product.

Product compliance documents

Latest versions of product safety information sheets (PSIS), product safety data sheets (SDS) and other product liability documents are available in our website www.borealisgroup.com.

Sustainability aspects

Borealis is ever mindful of the impact of our products on the planet. We promote Design for Circularity (DfC) and Design for Recycling (DfR) to conserve natural resources and to reduce the environmental impact of products over their entire lifetime (including production, use phase and after phase). DfR helps ensure that material can be effectively recycled while maximizing the material performance efficiency.

Further information on sustainability and Design for Recycling (DfR) can be found from our websites www.borealisgroup.com and www.borealiseverminds.com.

Regional Availability

North America: Grade available under the name MD231UU

For information on regional availability please contact Borealis Sales Representative.

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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