

Borealis PP MD231U

Polypropylene
Borealis AG

PROSPECTOR®

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Technical Data

Product 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 conditioning parts
- Air filters
- Automotive under the bonnet parts

Special Features

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

General

Material Status	• Commercial: Active		
Literature ¹	• Technical Datasheet (English)		
UL Yellow Card ²	• E108112-218651		
Search for UL Yellow Card	• Borealis AG		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Mineral, 20% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Heat Stabilized • High Dimensional Stability	• Low Shrinkage • Medium Flow	• Recyclable Material
Uses	• Automotive Applications	• Automotive Under the Hood	• Filters
Processing Method	• Injection Molding		
Multi-Point Data	• Isothermal Stress vs. Strain (ISO 11403-1)	• Secant Modulus vs. Strain (ISO 11403-1)	

Physical	Nominal Value Unit	Test Method
Density	1.05 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	6.0 g/10 min	ISO 1133
Mechanical	Nominal Value Unit	Test Method
Tensile Stress	36.0 MPa	ISO 527-2/50
Flexural Modulus ⁴	2700 MPa	ISO 178
Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength		ISO 179/1eA
-20°C	1.0 kJ/m ²	
23°C	3.0 kJ/m ²	
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load 0.45 MPa, Unannealed	125 °C	ISO 75-2/B
Additional Information	Nominal Value Unit	Test Method
Emission	< 50.0 µgC/g	VDA 277
Fogging - 16 hr (100°C)	< 2.0 mg	DIN 75201



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Injection	Nominal Value Unit
Drying Temperature	80 °C
Drying Time	2.0 hr
Hopper Temperature	40 to 80 °C
Processing (Melt) Temp	220 to 260 °C
Mold Temperature	30 to 50 °C
Holding Pressure	30.0 to 60.0 MPa

Injection Notes

Flow front speed: 100 to 200 mm/s

Screw speed: Low to medium

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

³ Typical properties: these are not to be construed as specifications.

⁴ 2.0 mm/min



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Where to Buy

Supplier

Borealis AG

Vienna, Vienna Austria

Telephone: +43-122-400-302

Web: <http://www.borealisgroup.com/>

Distributor

Biesterfeld

Biesterfeld is a Pan European distribution company. Contact Biesterfeld for availability of individual products by country.

Telephone: +49-40-32008-0

Web: <http://www.biesterfeld-plastic.com/>

Availability: Bosnia and Herzegovina, Bulgaria, Ireland, Romania, Serbia, Turkey, United Kingdom

M. Holland Canada Company

Telephone: 905-665-1168

Web: <http://www.mholland.com/>

Availability: Canada

M. Holland Company

Telephone: 855-497-1403

Web: <http://www.mholland.com/>

Availability: Mexico, United States

Nexeo Plastics - Europe

Nexeo Plastics is a Pan European distribution company. Contact Nexeo for availability of individual products by country.

Telephone: +34-93-480-9125

Web: <https://www.nexeoplastics.com/>

Availability: Austria, Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Spain, Sweden, Switzerland, United Kingdom

