

## Borealis MD231U Polypropylene Compound, Mineral Filled

Category : Polymer , Thermoplastic , Polypropylene (PP) , Polypropylene, Mineral Reinforced

### Material Notes:

MD231U is a 20 % mineral filled polypropylene compound intended for injection molding. This material has excellent balanced mechanical properties and a medium melt flow rate. Applications: Air ducts, Air filters, Air conditioning parts, and Automotive under the bonnet parts. Information provided by Borealis AG

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Borealis-MD231U-Polypropylene-Compound-Mineral-Filled.php](http://www.lookpolymers.com/polymer_Borealis-MD231U-Polypropylene-Compound-Mineral-Filled.php)

Physical Properties	Metric	English	Comments
Density	1.05 g/cc	0.0379 lb/in <sup>3</sup>	ISO 1183
Linear Mold Shrinkage	0.011 cm/cm	0.011 in/in	Borealis Method; average process
Melt Flow	6.0 g/10 min	6.0 g/10 min	ISO 1133
	@Load 2.16 kg, Temperature 230 °C	@Load 4.76 lb, Temperature 446 °F	
	27.5 g/10 min	27.5 g/10 min	ISO 1133
	@Load 5.00 kg, Temperature 230 °C	@Load 11.0 lb, Temperature 446 °F	

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	80.6 MPa	11700 psi	358 N/30s; ISO 2039
Tensile Strength, Yield	36.0 MPa	5220 psi	50mm/min; ISO 527-2
Elongation at Yield	10 %	10 %	50mm/min; ISO 527-2
Flexural Modulus	2.70 GPa	392 ksi	2mm/min; ISO 178
Charpy Impact Unnotched	1.37 J/cm <sup>2</sup>	6.52 ft-lb/in <sup>2</sup>	ISO 179/1eU
	@Temperature -20.0 °C	@Temperature -4.00 °F	
	4.20 J/cm <sup>2</sup>	20.0 ft-lb/in <sup>2</sup>	ISO 179/1eU
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact, Notched	0.120 J/cm <sup>2</sup>	0.571 ft-lb/in <sup>2</sup>	ISO 179/1eA
	@Temperature -20.0 °C	@Temperature -4.00 °F	
	0.300 J/cm <sup>2</sup>	1.43 ft-lb/in <sup>2</sup>	ISO 179/1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
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Thermal Properties (at 0.46 MPa (66 psi))	Metric	English	Comments
Deflection Temperature at 1.8 MPa (264 psi)	70.0 °C	158 °F	ISO 75-2

Processing Properties	Metric	English	Comments
Processing Temperature	220 - 260 °C	428 - 500 °F	mass temperature
Feed Temperature	40.0 - 80.0 °C	104 - 176 °F	
Mold Temperature	30.0 - 50.0 °C	86.0 - 122 °F	
Injection Velocity	100 - 200 mm/sec	3.94 - 7.87 in/sec	
Hold Pressure	30.0 - 60.0 MPa	4350 - 8700 psi	

Descriptive Properties	Value	Comments
Back Pressure	low to medium	
Emission (µgC/g)	< 50	VDA 277
Fogging (mg)	< 2	100°C, 16h; DIN 75201
Screw Speed	low to medium	

## Contact Songhan Plastic Technology Co.,Ltd.

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