Technical Data Sheet

POLYFORT® PPC M5 RD LE

Polypropylene Copolymer
Engineering Plastics

Product Description
5% mineral filled high impact, low emission and low density PP-Copolymer; good scratch resistance and UV-stability

General			
Filler / Reinforcement	• Mineral, 5.0% Filler by Weight		
Features	• Good Scratch Resistance • Heat Stabilized	• High Impact Resistance • Low Density	• Low Emissions
Processing Method	• Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.920 g/cm³	0.920 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	14 cm³/10min	14 cm³/10min	ISO 1133
Molding Shrinkage	1.1 to 2.1 %	1.1 to 2.1 %	ISO 294-4
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	261000 psi	1800 MPa	ISO 527-2/1A/1
Tensile Stress (Yield)	3190 psi	22.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	4.0 %	4.0 %	ISO 527-2/1A/50
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	1.4 ft·lb/in²	3.0 kJ/m²	
73°F (23°C)	24 ft·lb/in²	50 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	21 ft·lb/in²	45 kJ/m²	
73°F (23°C)	No Break	No Break	
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Ball Indentation Hardness (H 358/30)	9430 psi	65.0 MPa	ISO 2039-1
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	192 °F	89.0 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	129 °F	54.0 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	277 °F	136 °C	ISO 306/A50
--	140 °F	60.0 °C	ISO 306/B50
Electrical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Surface Resistivity	> 1.0E+15 ohms	> 1.0E+15 ohms	IEC 60093
Volume Resistivity	> 1.0E+13 ohms·m	> 1.0E+13 ohms·m	IEC 62631-3-1
Flammability	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Burning Rate			
0.0787 in (2.00 mm)	< 3.9 in/min	< 100 mm/min	ISO 3795
0.0787 in (2.00 mm)	< 3.9 in/min	< 100 mm/min	FMVSS 302
Flammability Classification			IEC 60695-11-10, -20
0.06 in (1.5 mm)	HB	HB	
0.12 in (3.0 mm)	HB	HB	

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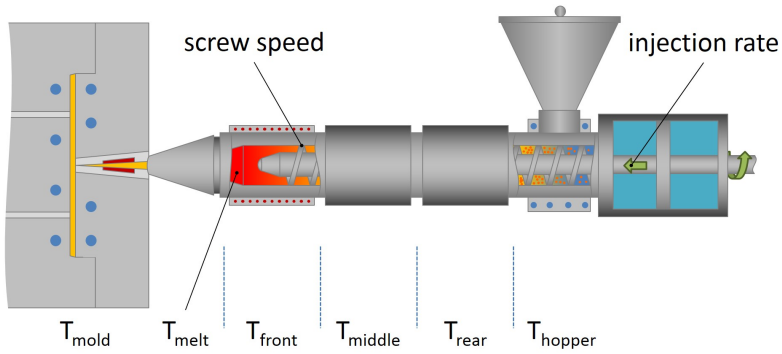

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	2.0 to 3.0 hr	2.0 to 3.0 hr
Suggested Max Regrind	20 %	20 %
Processing (Melt) Temp	446 to 518 °F	230 to 270 °C
Mold Temperature	104 to 158 °F	40 to 70 °C

Injection Notes

Drying normally not necessary.
Injection molding parameters also influence emission properties, which are often required for automotive interior applications. Generally speaking, the emission, odor and fogging behavior of finished parts is improved by lowering the melt temperature, reducing residence time and avoiding high shear stress.

Notes

These are typical property values not to be construed as specification limits.