

Technical Data Sheet

# Matrixx FP63E33

Polyamide 6  
 LyondellBasell Industries  
 Engineering Plastics

**General**

Filler / Reinforcement	• Glass Fiber, 33% Filler by Weight
Forms	• Pellets
Processing Method	• Injection Molding

**Physical**

	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.38	1.38 g/cm <sup>3</sup>	ASTM D792

**Mechanical**

	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638
Yield	27000 psi	186 MPa	
Break	22000 psi	152 MPa	
Flexural Modulus - Tangent	1.20E+6 psi	8270 MPa	ASTM D790

**Impact**

	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact	1.8 ft·lb/in	96 J/m	ASTM D256

**Thermal**

	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 Psi (0.45 Mpa), Unannealed	410 °F	210 °C	
264 Psi (1.8 Mpa), Unannealed	390 °F	199 °C	

**Additional Information**

1F870A/PR1155  
 Revision: 5/2/2020

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	160 to 200 °F	71 to 93 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Suggested Max Moisture	0.10 %	0.10 %
Rear Temperature	480 to 540 °F	249 to 282 °C
Middle Temperature	500 to 540 °F	260 to 282 °C
Front Temperature	500 to 540 °F	260 to 282 °C
Processing (Melt) Temp	480 to 540 °F	249 to 282 °C
Mold Temperature	180 to 200 °F	82 to 93 °C
Injection Rate	Moderate-Fast	Moderate-Fast
Back Pressure	< 50.0 psi	< 0.345 MPa
Cushion	0.250 to 0.500 in	6.35 to 12.7 mm

**Injection Notes**

Dessicant dryer with -20°F dewpoint  
Screw Speed: Slow to Medium

**Notes**

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