



Technical Data Sheet

Matrixx FP63E45

Polyamide 6
LyondellBasell Industries
Engineering Plastics

General

Filler / Reinforcement	• Glass Fiber, 45% Filler by Weight
Forms	• Pellets
Processing Method	• Injection Molding

Physical

	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.50	1.50 g/cm ³	ASTM D792

Mechanical

	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield)	24000 psi	165 MPa	ASTM D638
Flexural Modulus	1.60E+6 psi	11000 MPa	ASTM D790

Impact

	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact	1.5 ft·lb/in	80 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	395 °F	202 °C	

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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 520 °F	249 to 271 °C
Middle Temperature	480 to 540 °F	249 to 282 °C
Front Temperature	480 to 540 °F	249 to 282 °C
Processing (Melt) Temp	480 to 540 °F	249 to 282 °C
Mold Temperature	160 to 180 °F	71 to 82 °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.