

Technical Data Sheet

Matrixx FP63E43

Polyamide 6
 LyondellBasell Industries
 Engineering Plastics

General

| | |
|------------------------|-------------------------------------|
| Filler / Reinforcement | • Glass Fiber, 43% Filler by Weight |
| Forms | • Pellets |

Physical

| | Nominal Value (English) | Nominal Value (SI) | Test Method |
|----------------------------|-------------------------|------------------------|-------------|
| Density / Specific Gravity | 1.49 | 1.49 g/cm ³ | ASTM D792 |

Mechanical

| | Nominal Value (English) | Nominal Value (SI) | Test Method |
|----------------------------|-------------------------|--------------------|-------------|
| Tensile Strength (Yield) | 30000 psi | 207 MPa | ASTM D638 |
| Flexural Modulus - Tangent | 1.50E+6 psi | 10300 MPa | ASTM D790 |

Impact

| | Nominal Value (English) | Nominal Value (SI) | Test Method |
|---------------------|-------------------------|--------------------|-------------|
| Notched Izod Impact | 2.4 ft·lb/in | 130 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 | |
| RTI Str | 150 °F | 65.6 °C | UL 746B |

Flammability

| | Nominal Value (English) | Nominal Value (SI) | Test Method |
|---------------------------------|-------------------------|--------------------|-------------|
| Flame Rating (0.06 In (1.5 Mm)) | HB | HB | UL 94 |

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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 | 500 to 550 °F | 260 to 288 °C |
| Middle Temperature | 500 to 550 °F | 260 to 288 °C |
| Front Temperature | 500 to 550 °F | 260 to 288 °C |
| Processing (Melt) Temp | 500 to 560 °F | 260 to 293 °C |
| Mold Temperature | 180 to 200 °F | 82 to 93 °C |
| Injection Rate | Fast | Fast |
| Back Pressure | < 50.0 psi | < 0.345 MPa |
| Cushion | 0.250 to 0.500 in | 6.35 to 12.7 mm |

Injection Notes

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

Notes

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